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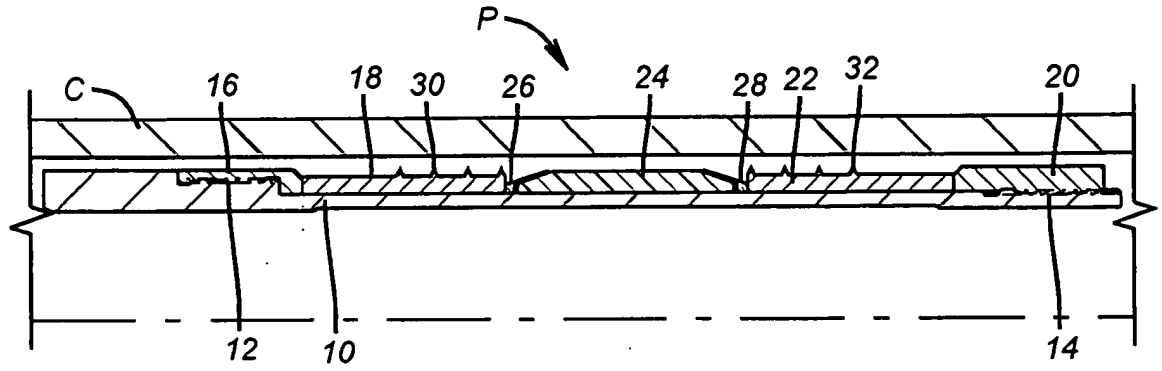


FIG. 1

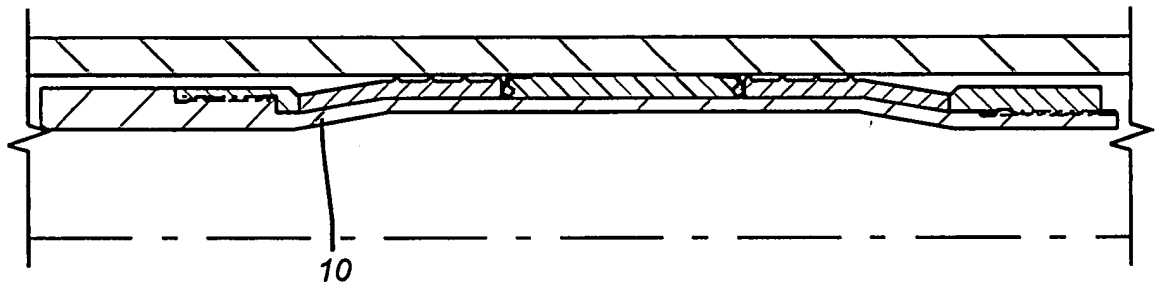


FIG. 2

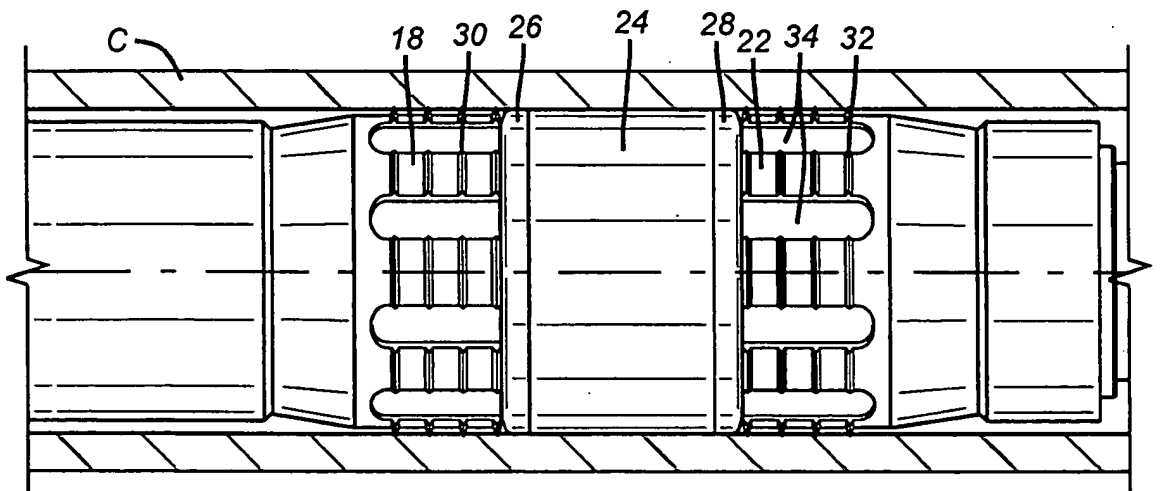


FIG. 3

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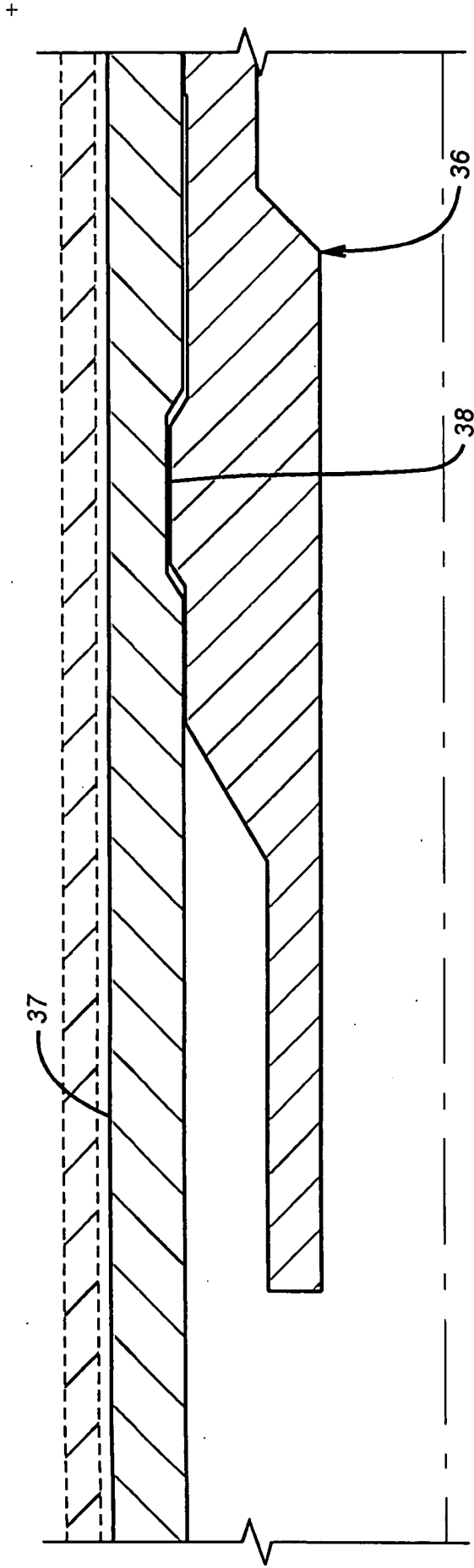


FIG. 4a

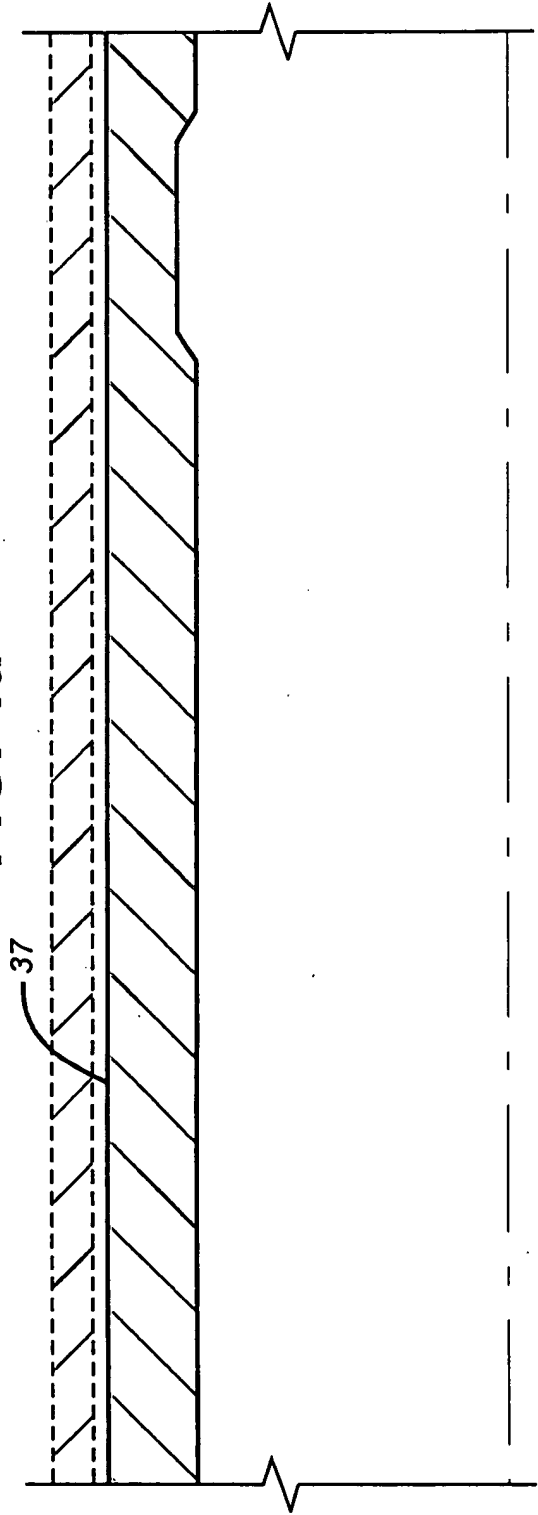


FIG. 5a

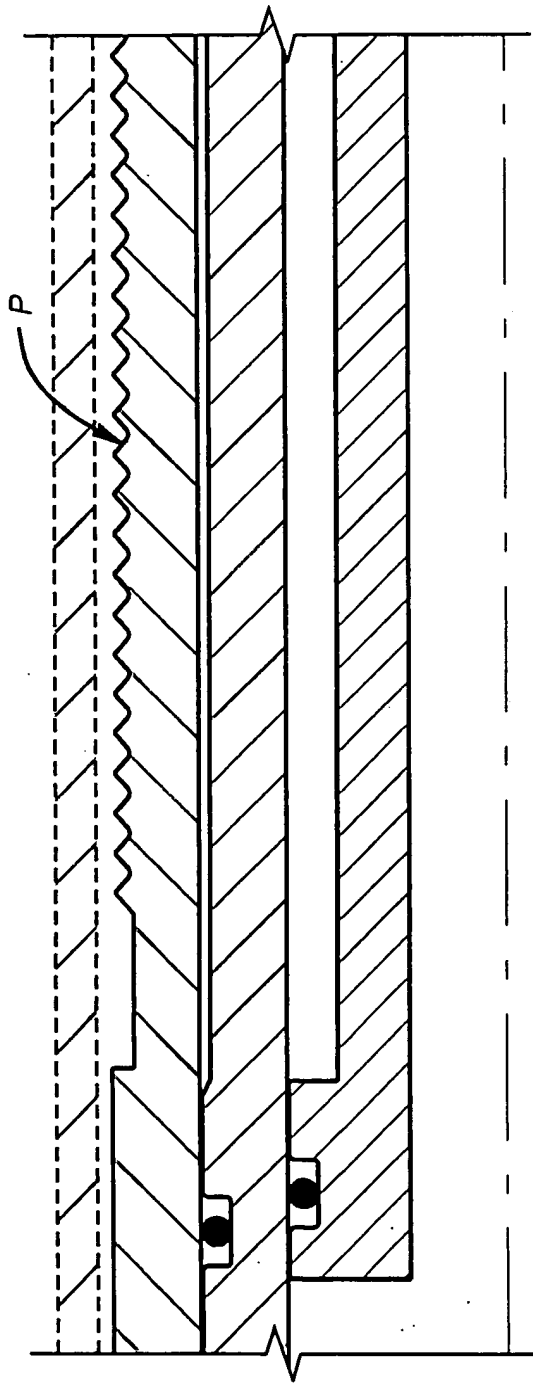


FIG. 4b

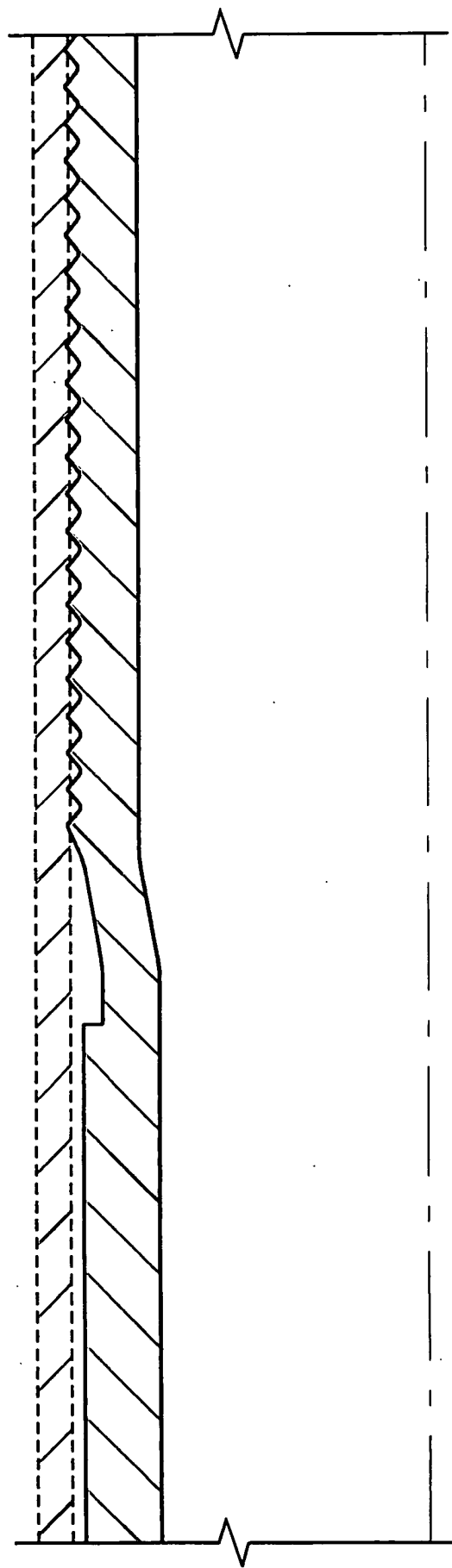


FIG. 5b

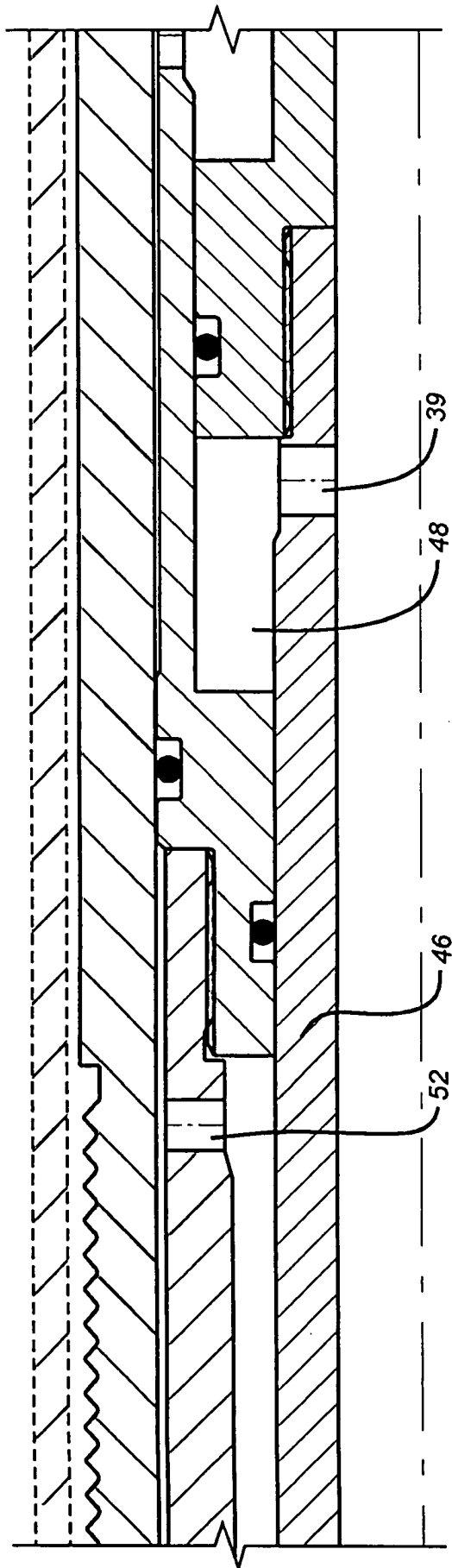


FIG. 4c

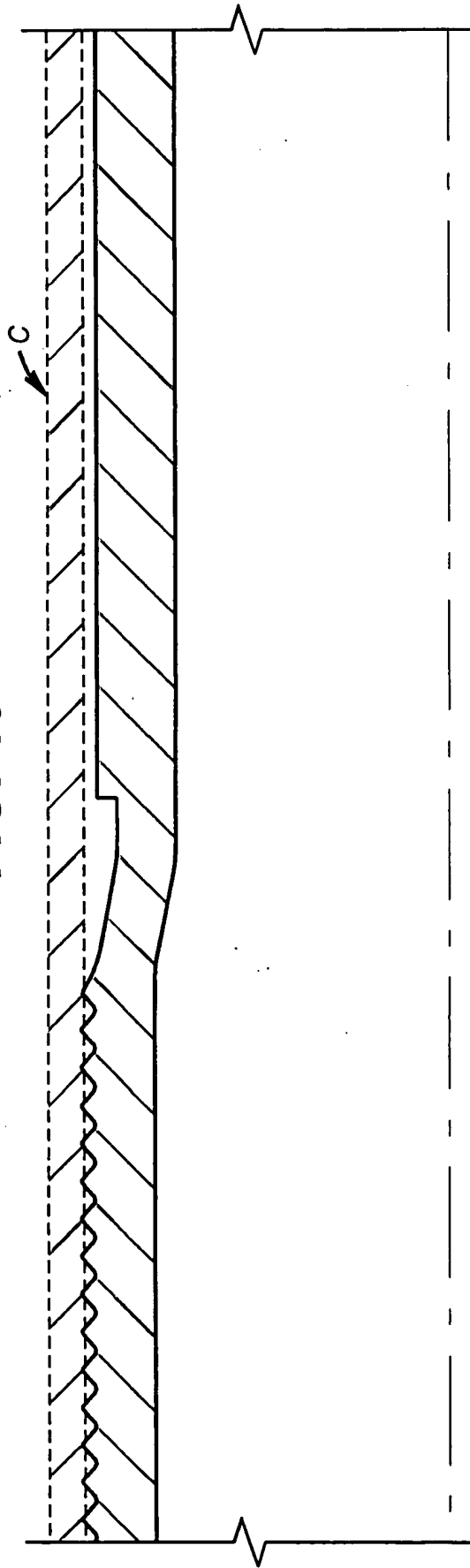


FIG. 5c

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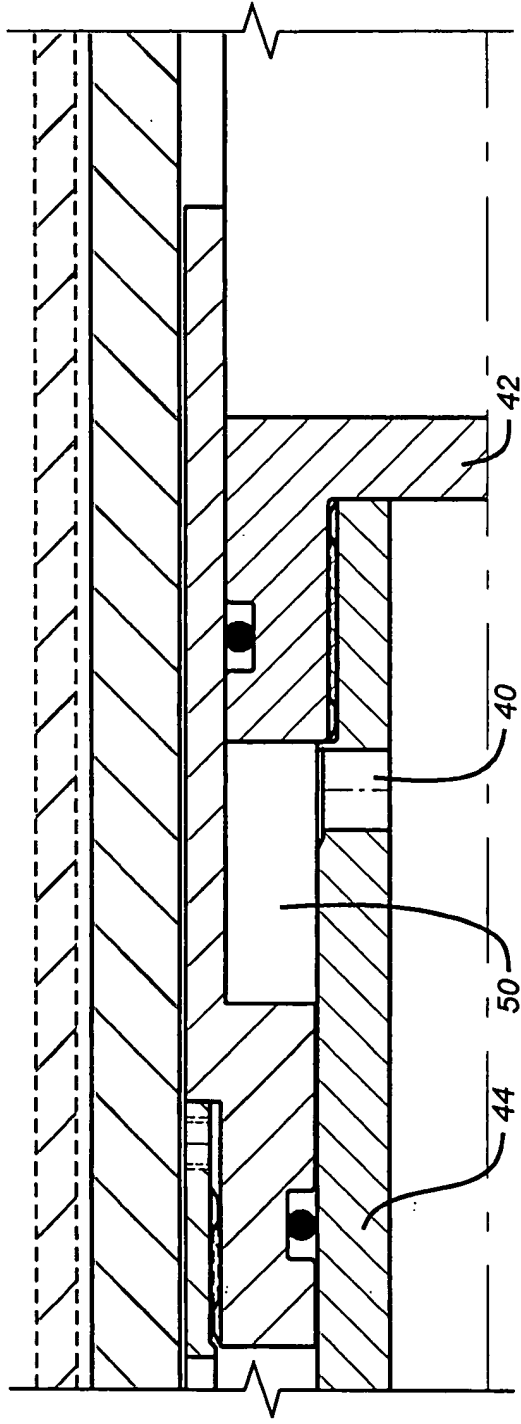


FIG. 4d

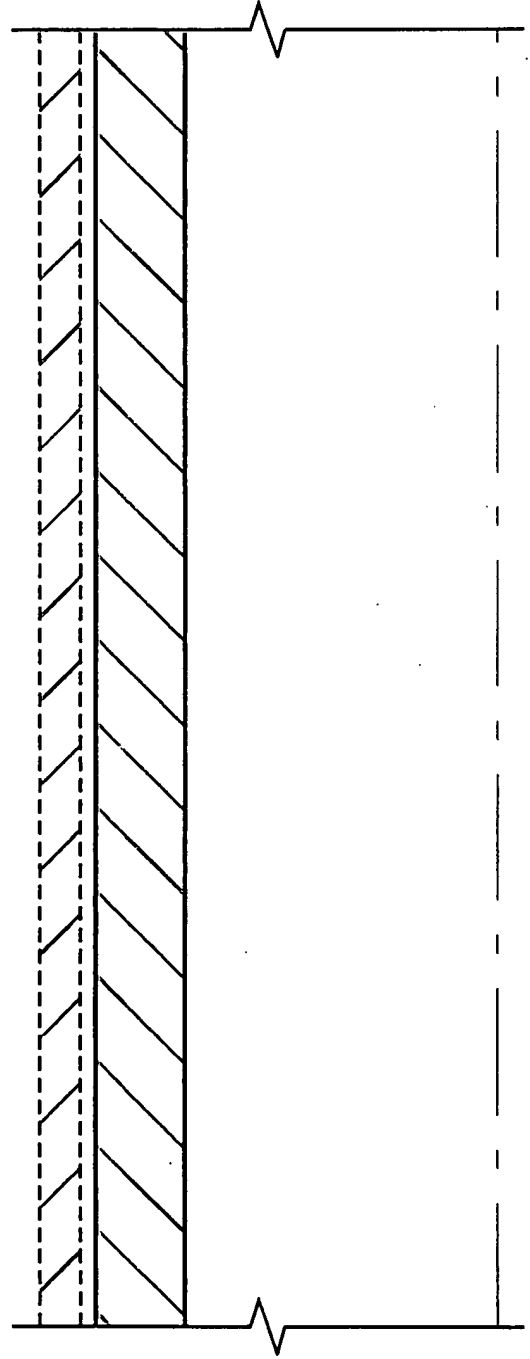


FIG. 5d

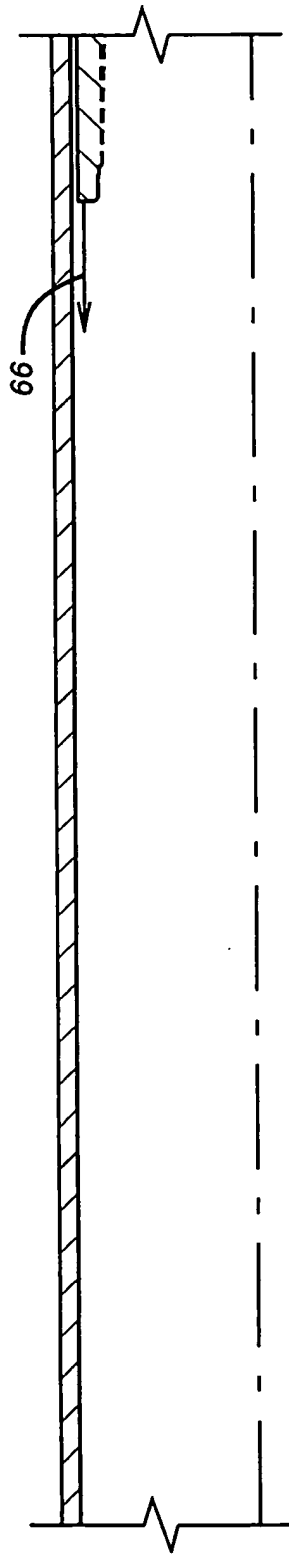


FIG. 6a

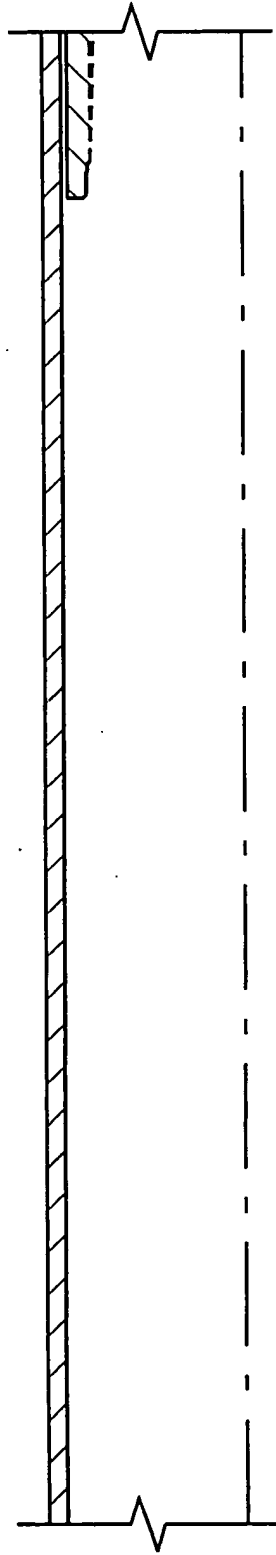


FIG. 7a

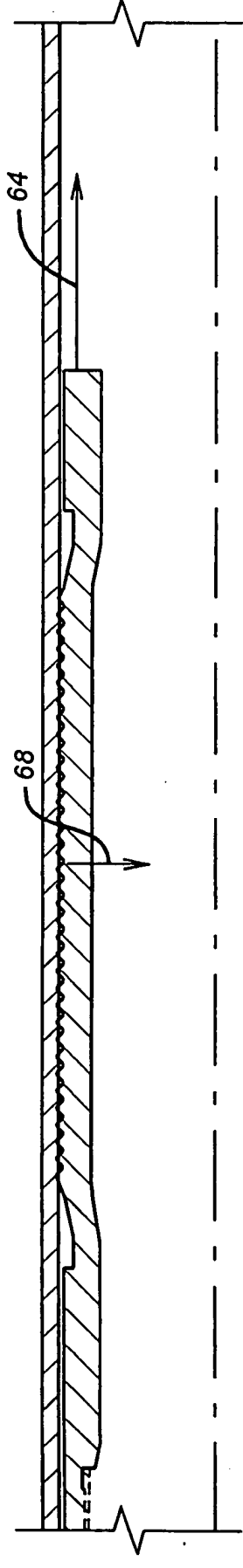


FIG. 6b

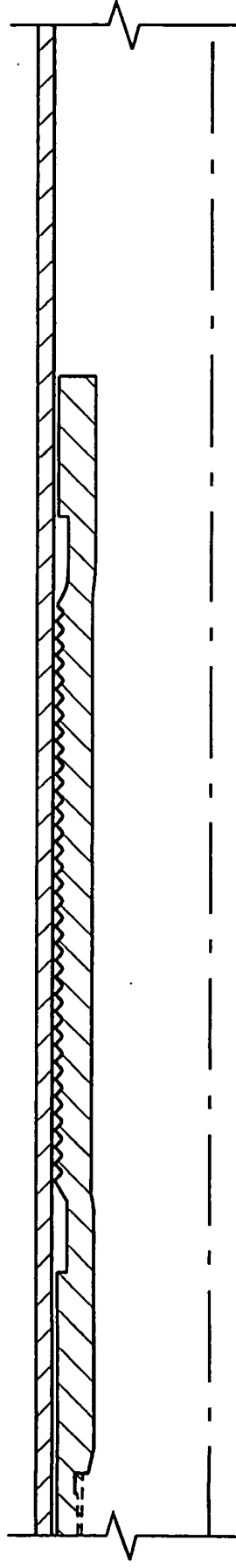


FIG. 7b

+

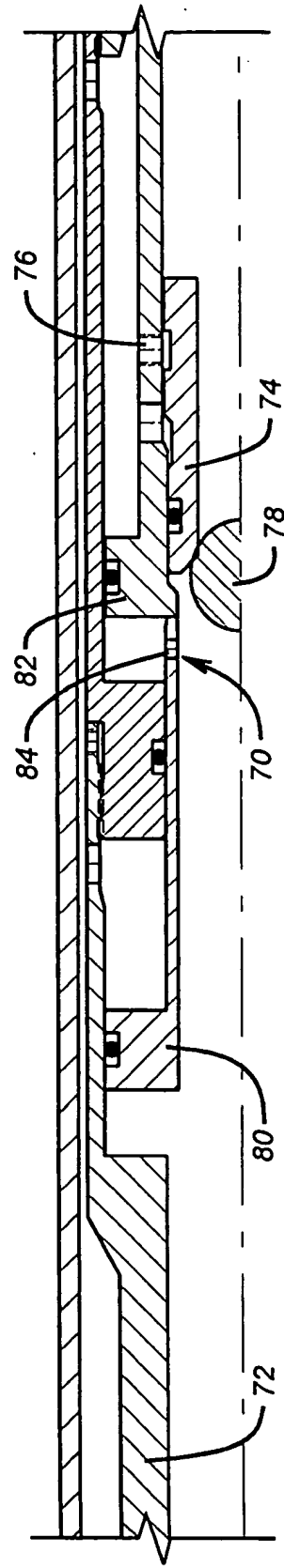


FIG. 8a

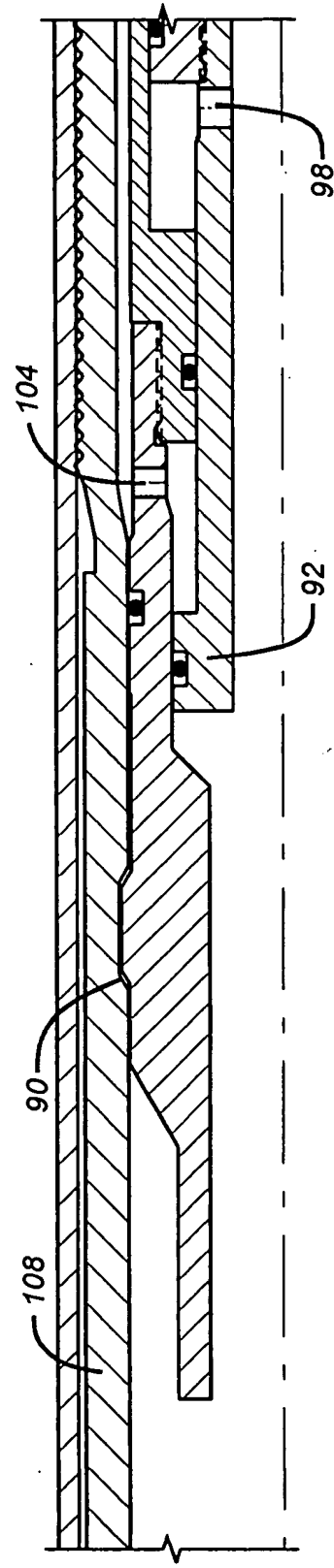


FIG. 9a

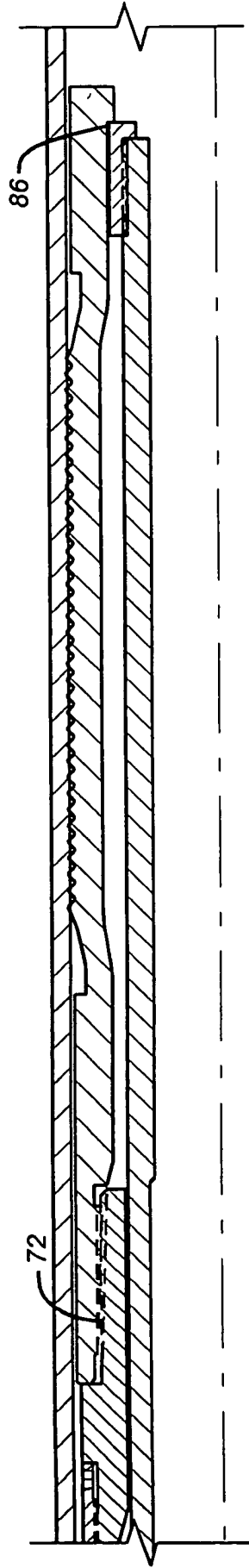


FIG. 8b

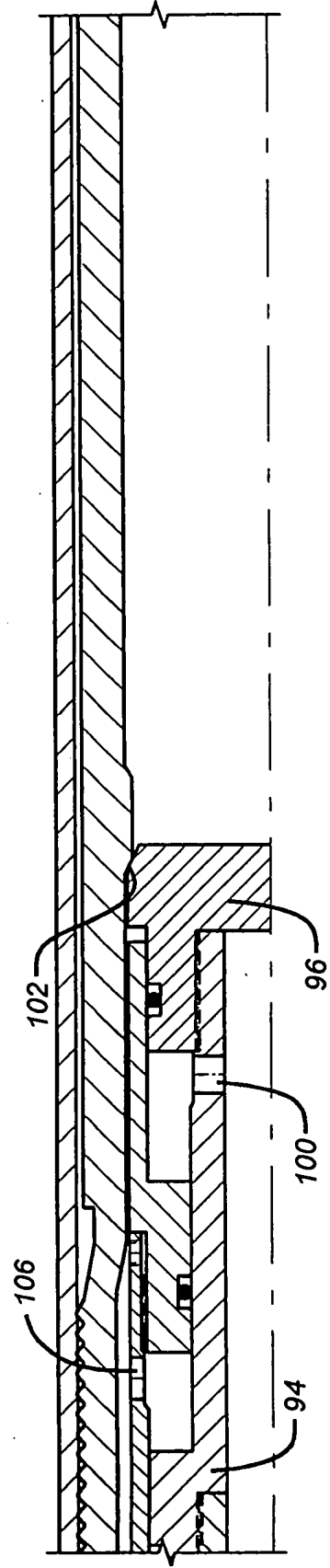


FIG. 9b

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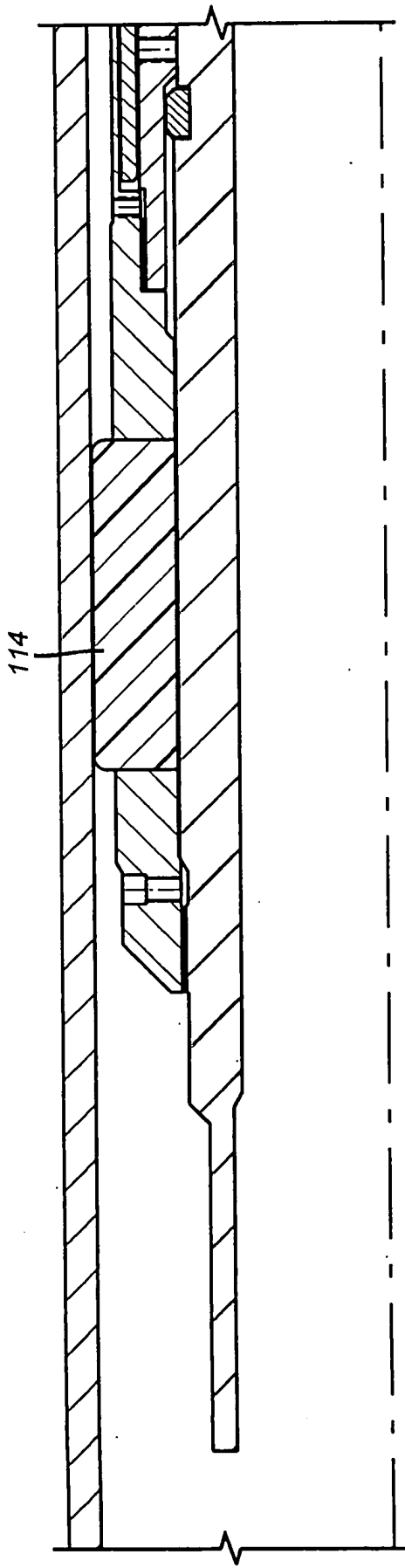


FIG. 10a

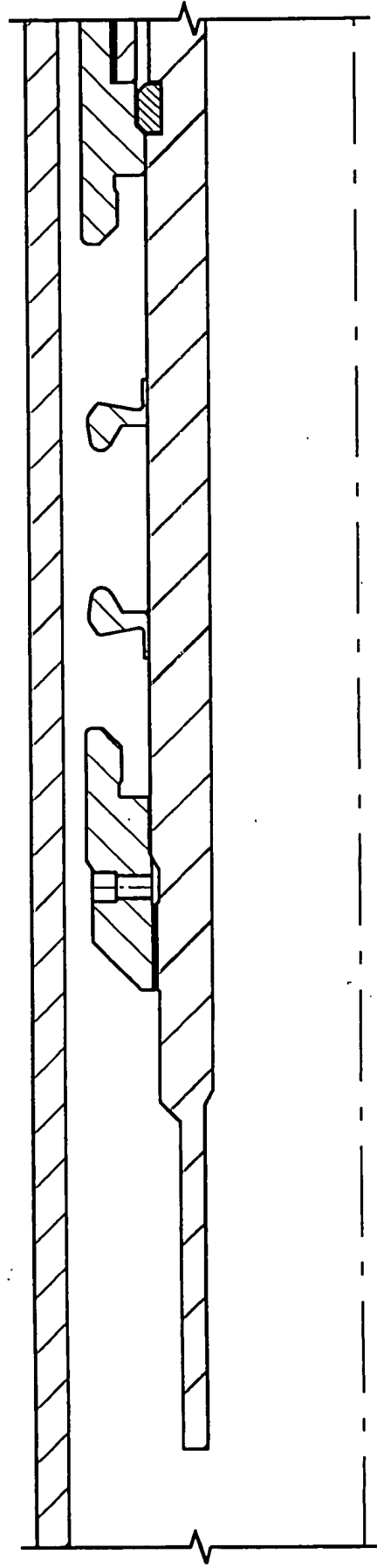


FIG. 11a

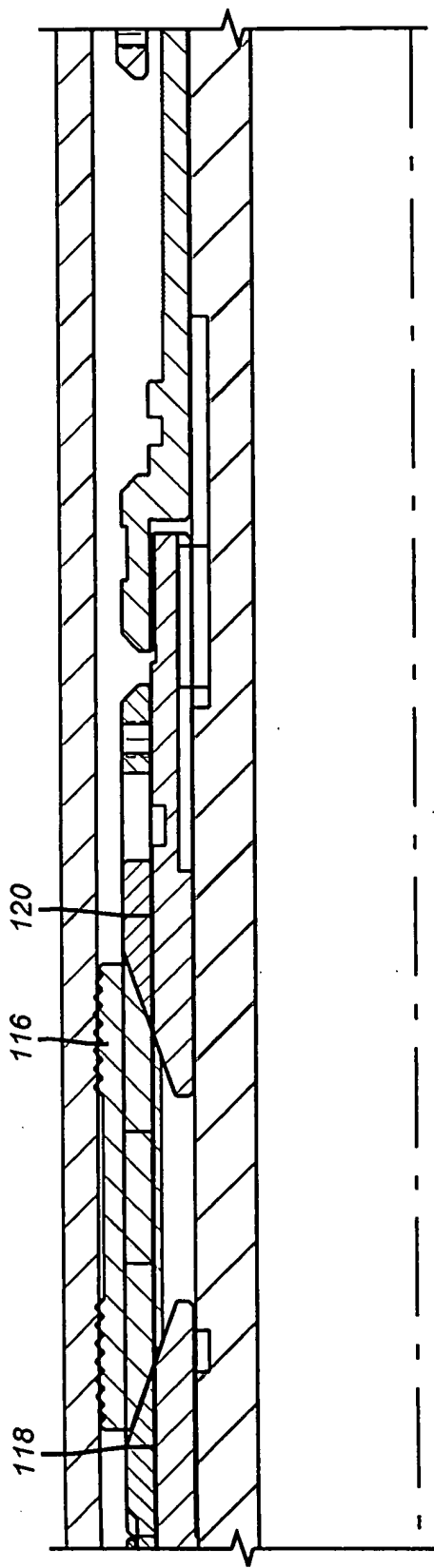


FIG. 10b

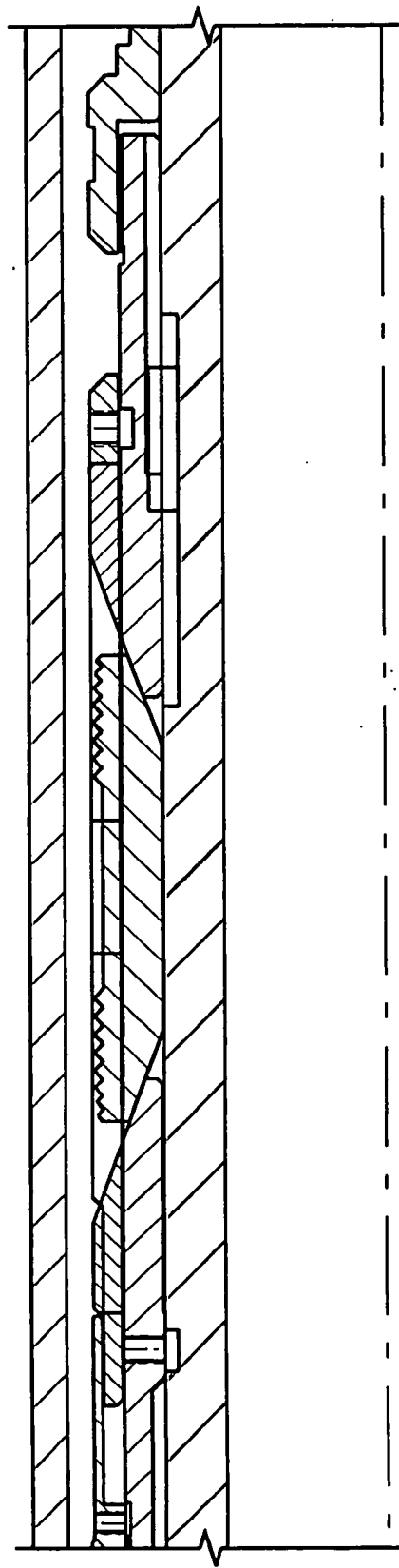


FIG. 11b

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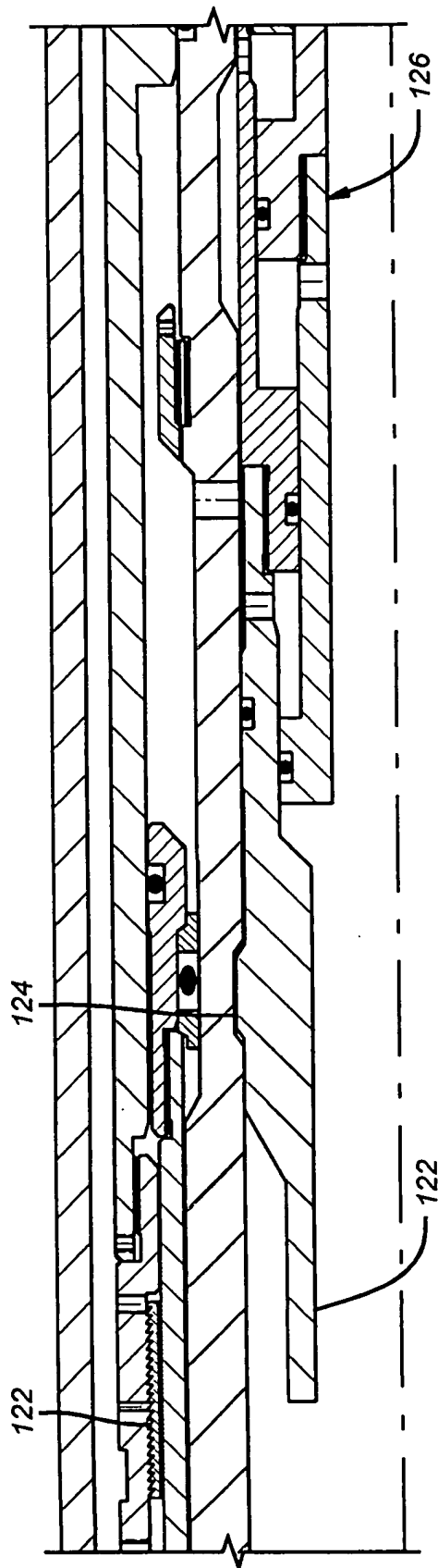


FIG. 10c

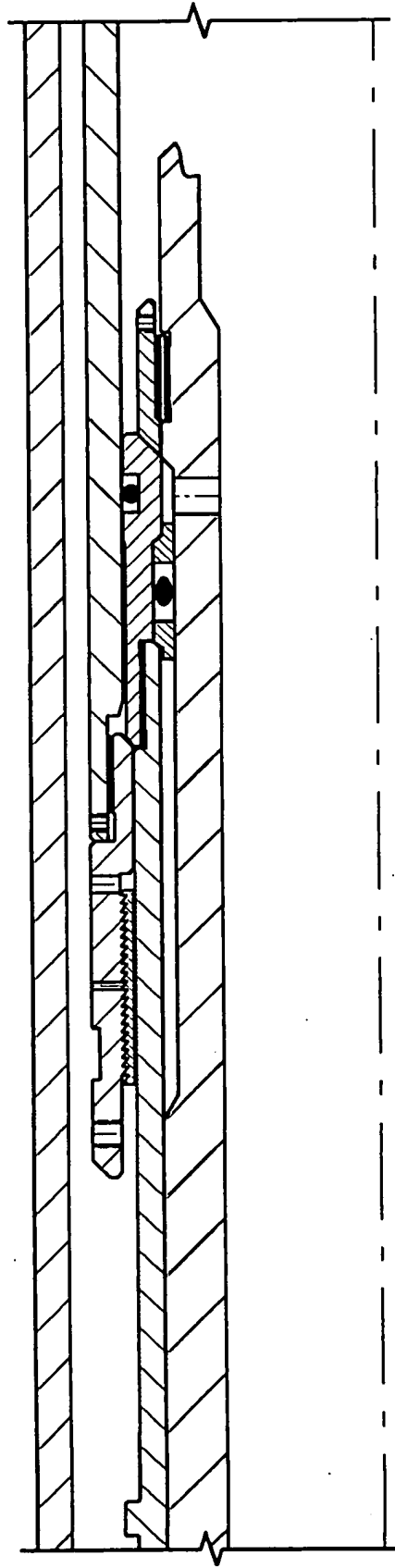


FIG. 11c

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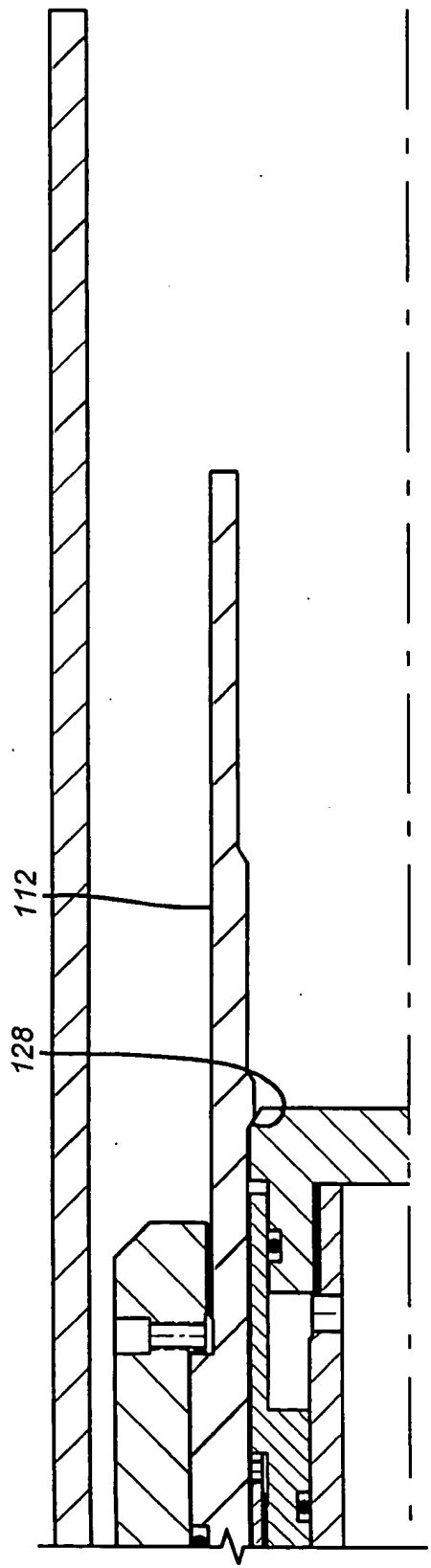


FIG. 10d

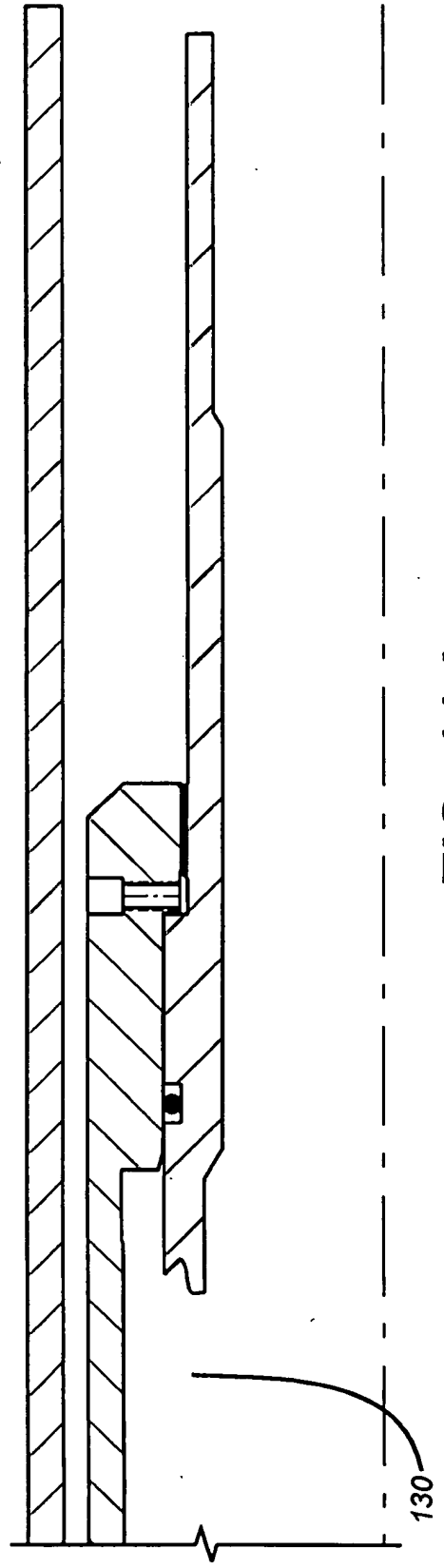


FIG. 11d

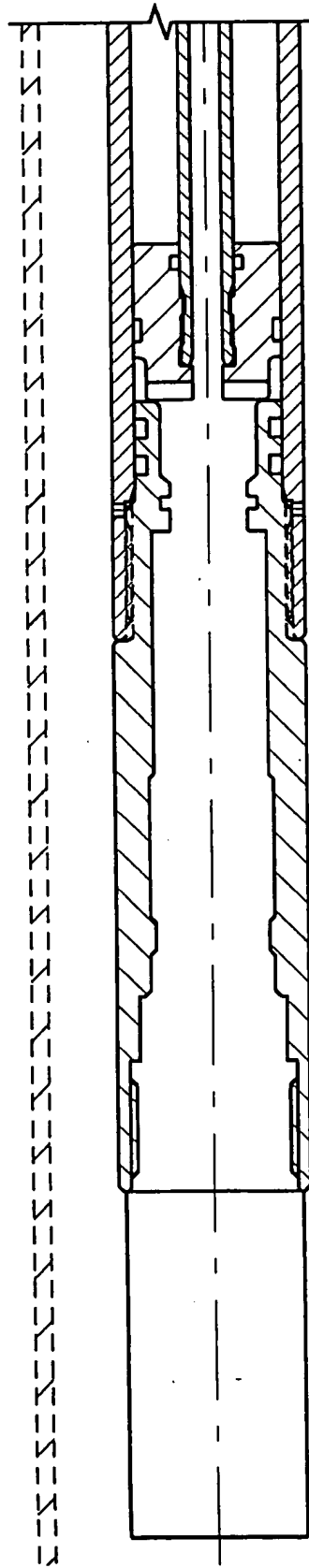


FIG. 12a

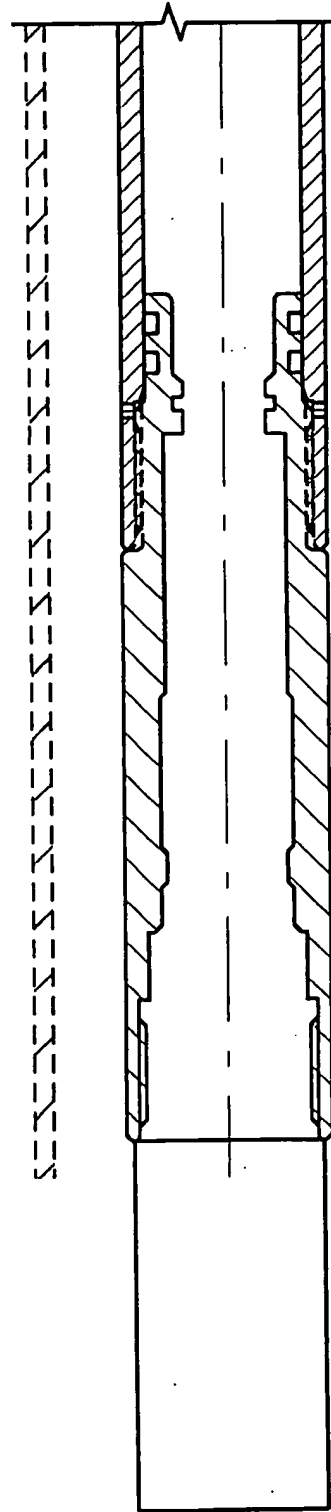


FIG. 13a

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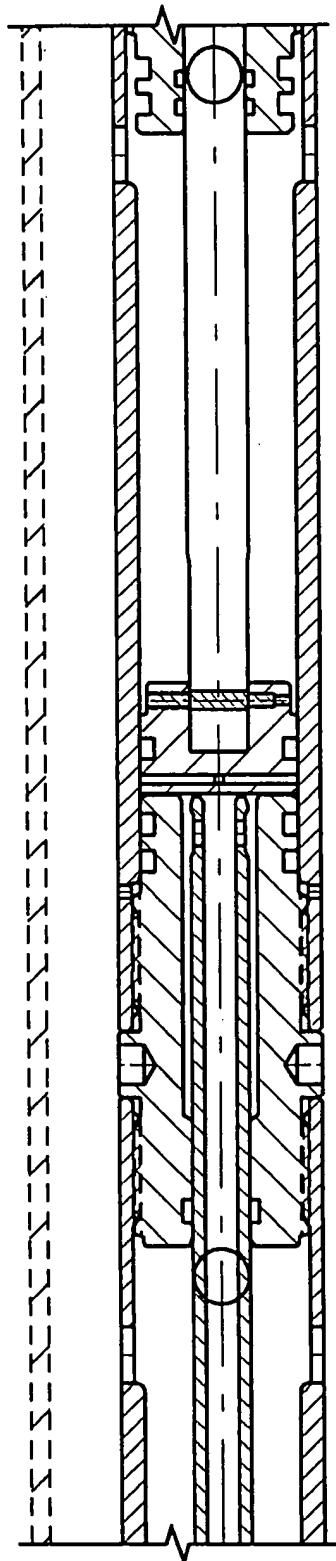


FIG. 12b

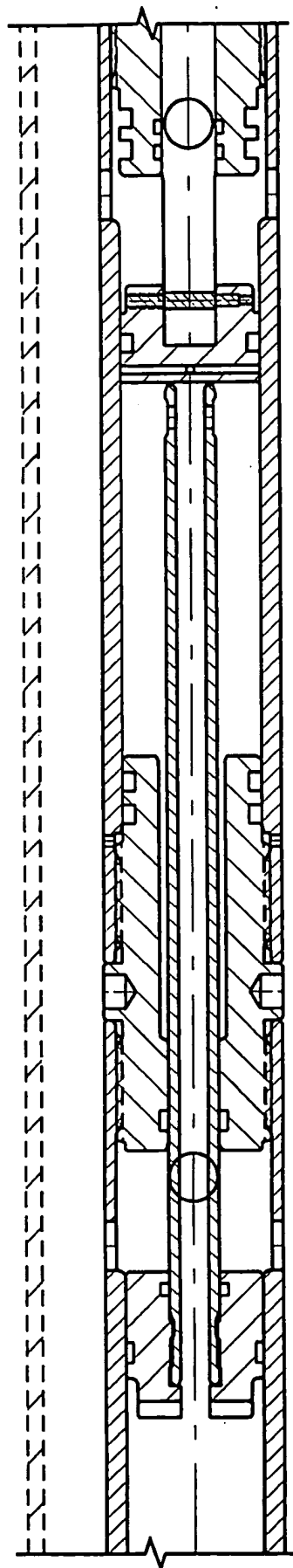


FIG. 13b

+

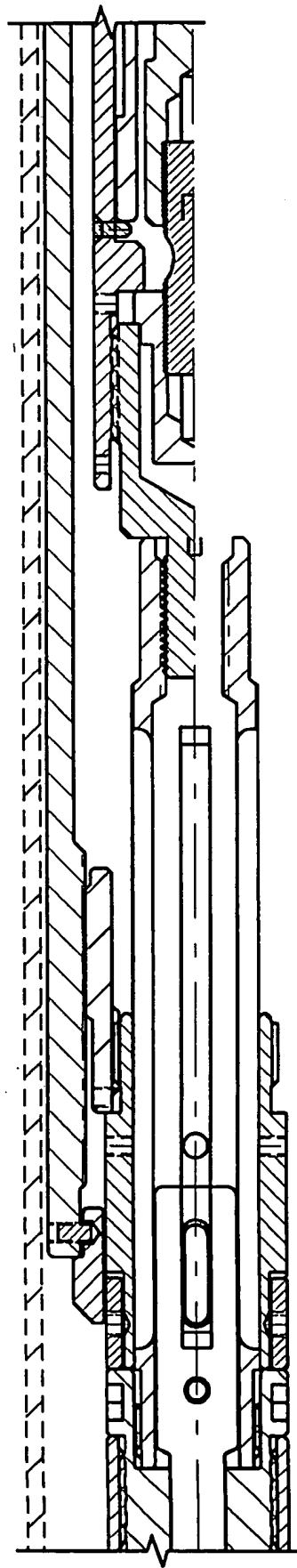


FIG. 12c

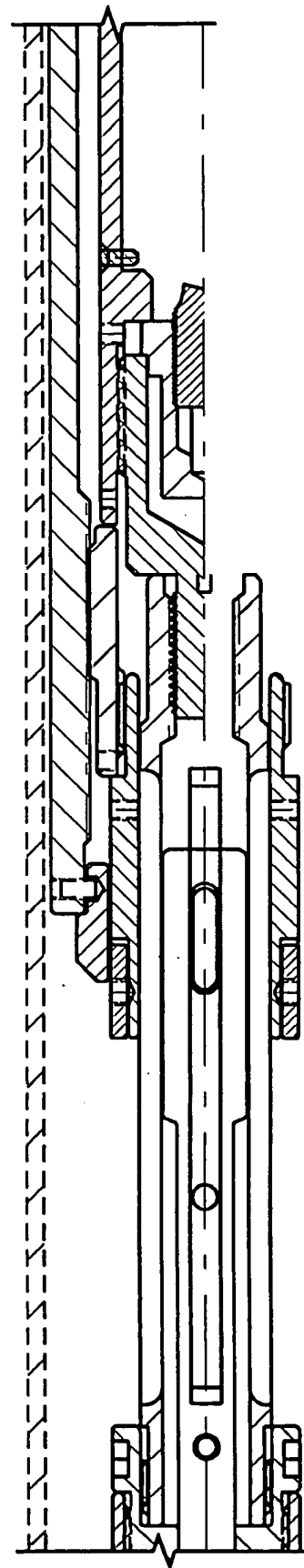


FIG. 13c

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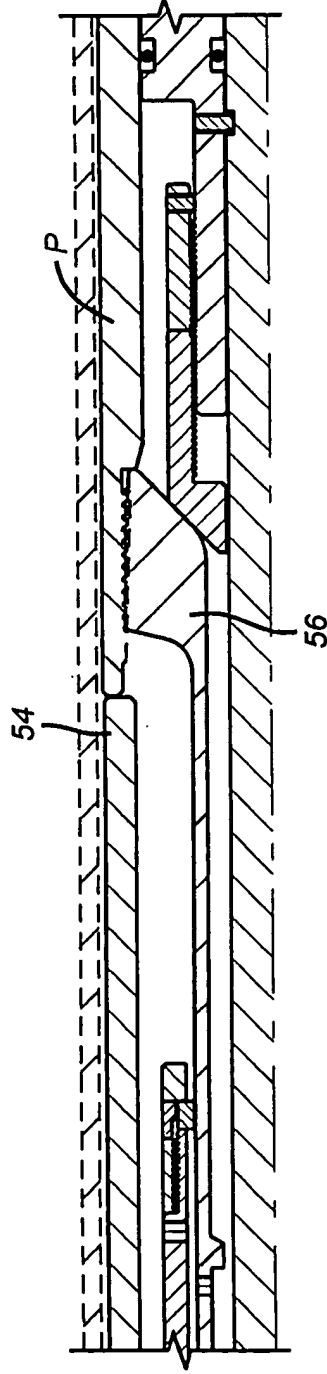


FIG. 12d

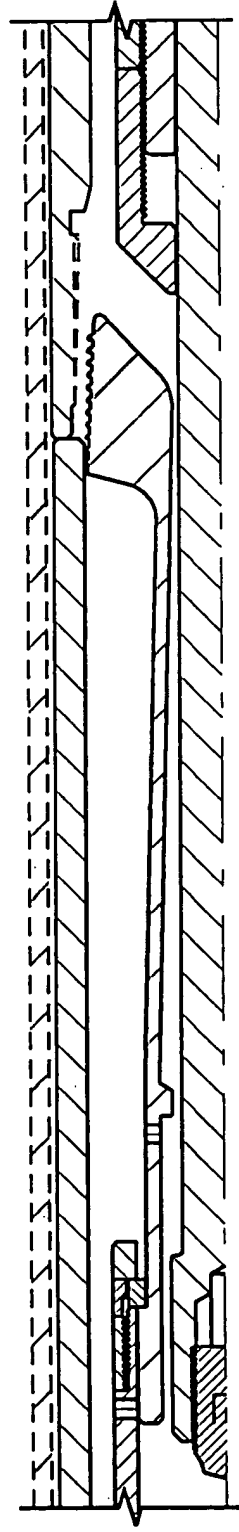


FIG. 13d

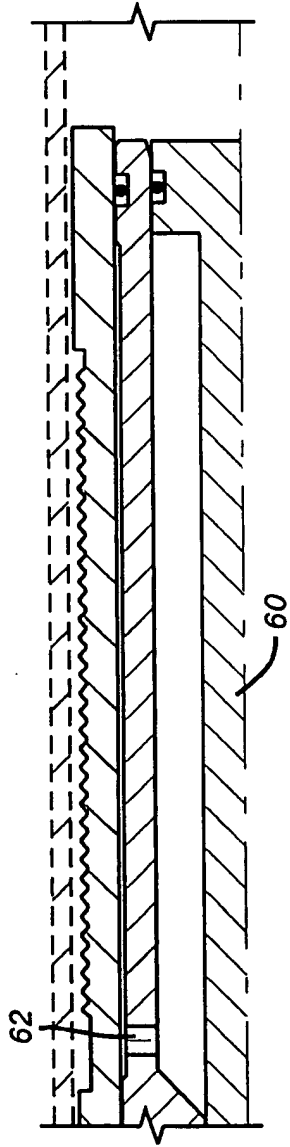


FIG. 12e

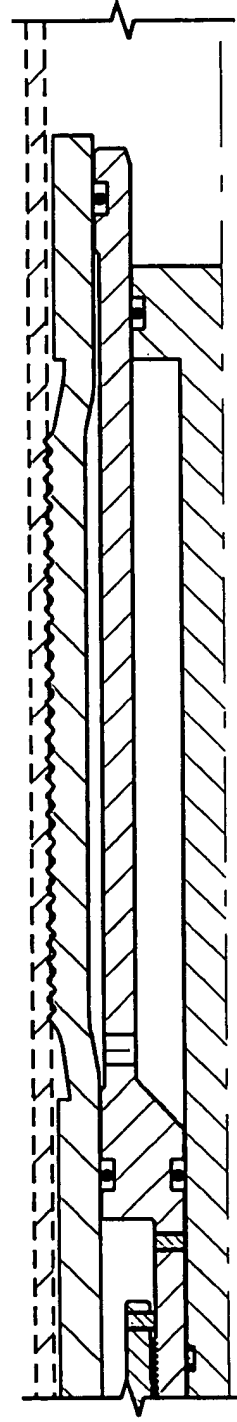
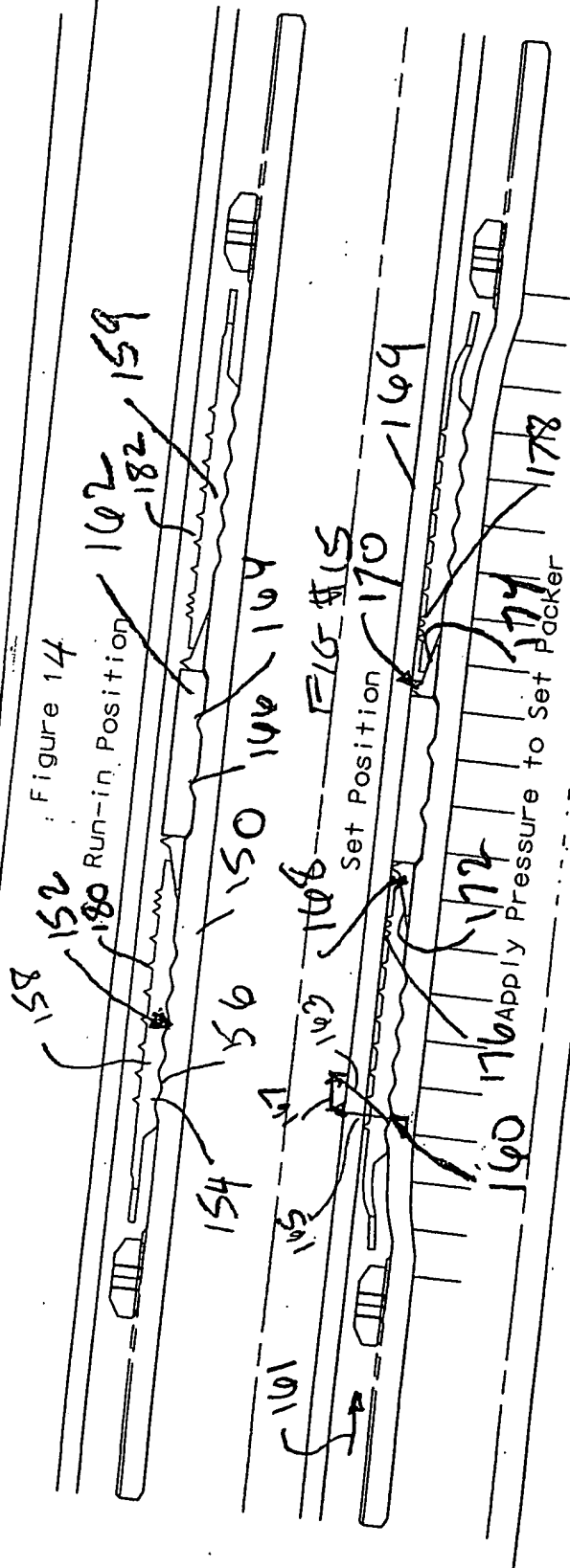


FIG. 13e

Figure 14



Expandable Packer - Set Position

Collet Fingers - Contact more of the casing circumferentially

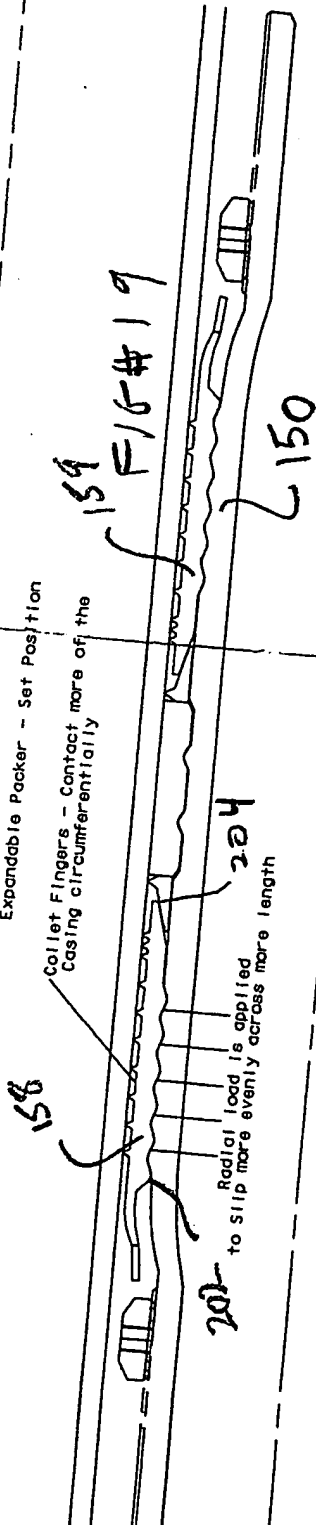


Figure 4 - Low Casing Stress

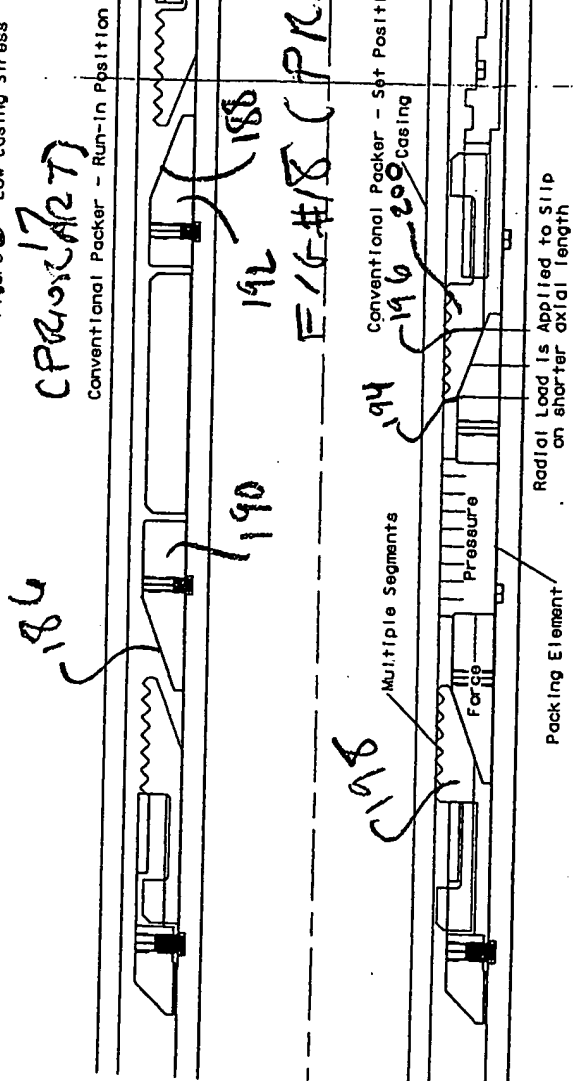
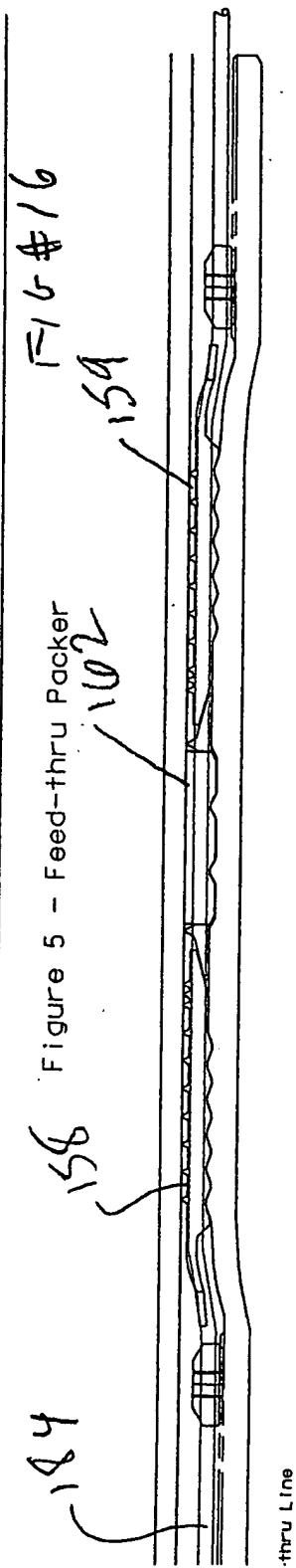


Figure 5 - Feed-thru Packer



FIG#20

FIG#21

FIG#22

FIG#23

Drilling Plug

Plug Drilled out

Set Packer

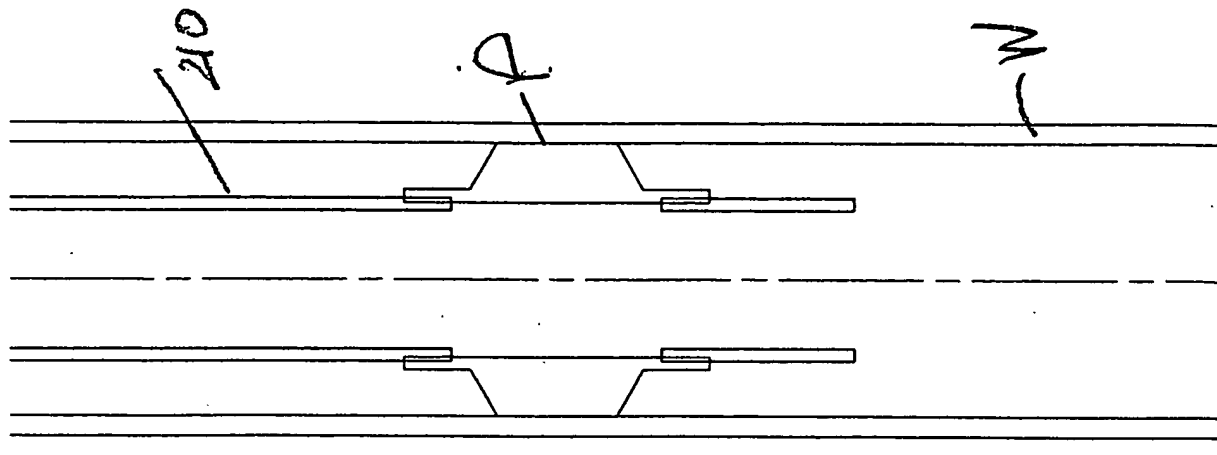
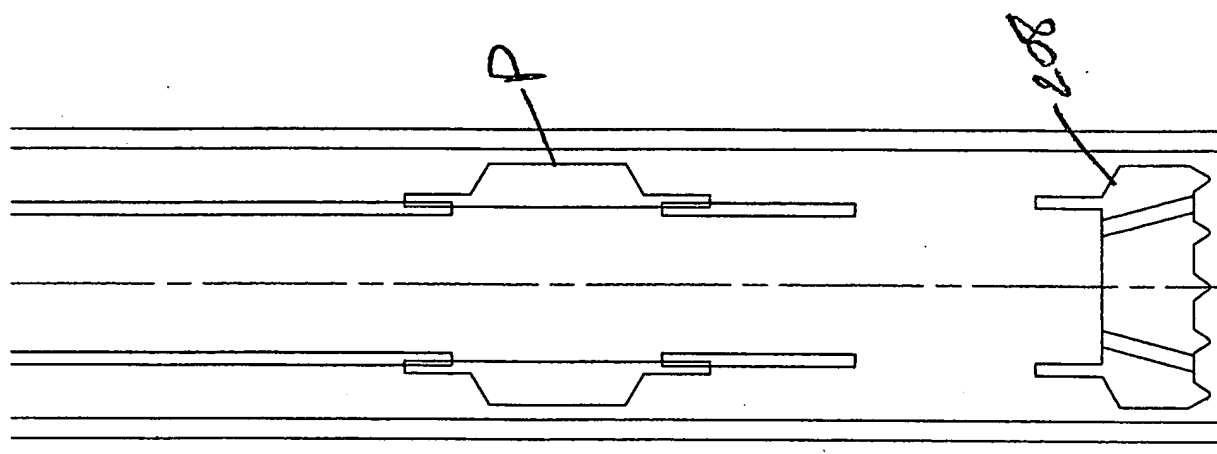
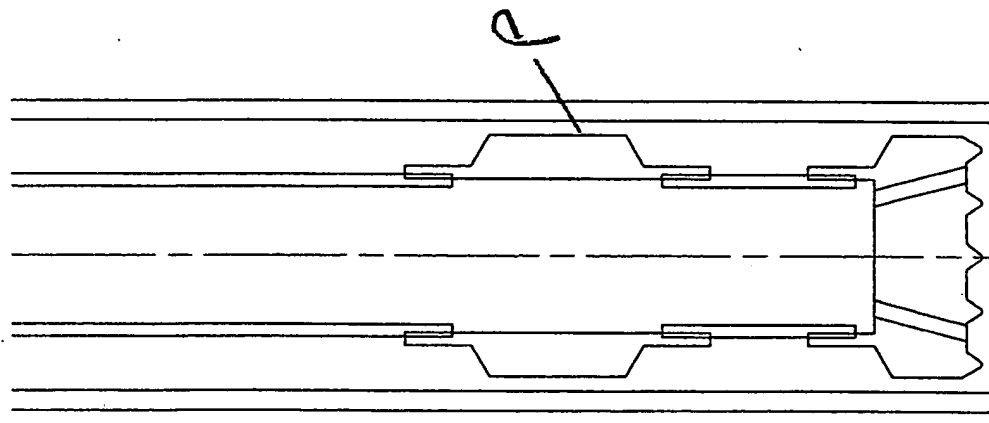
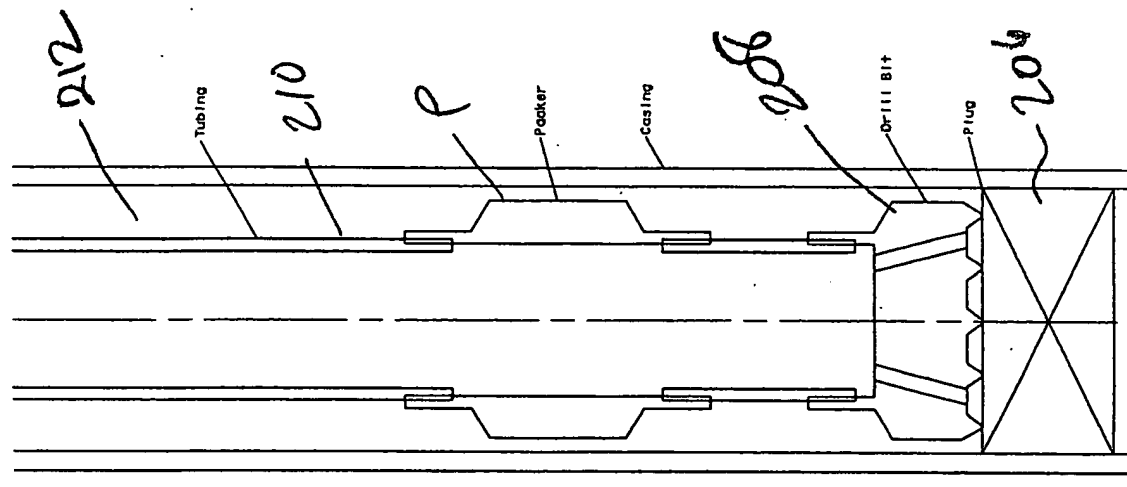


Figure 8
Liner Hanger & Liner Top
Isolation Packer

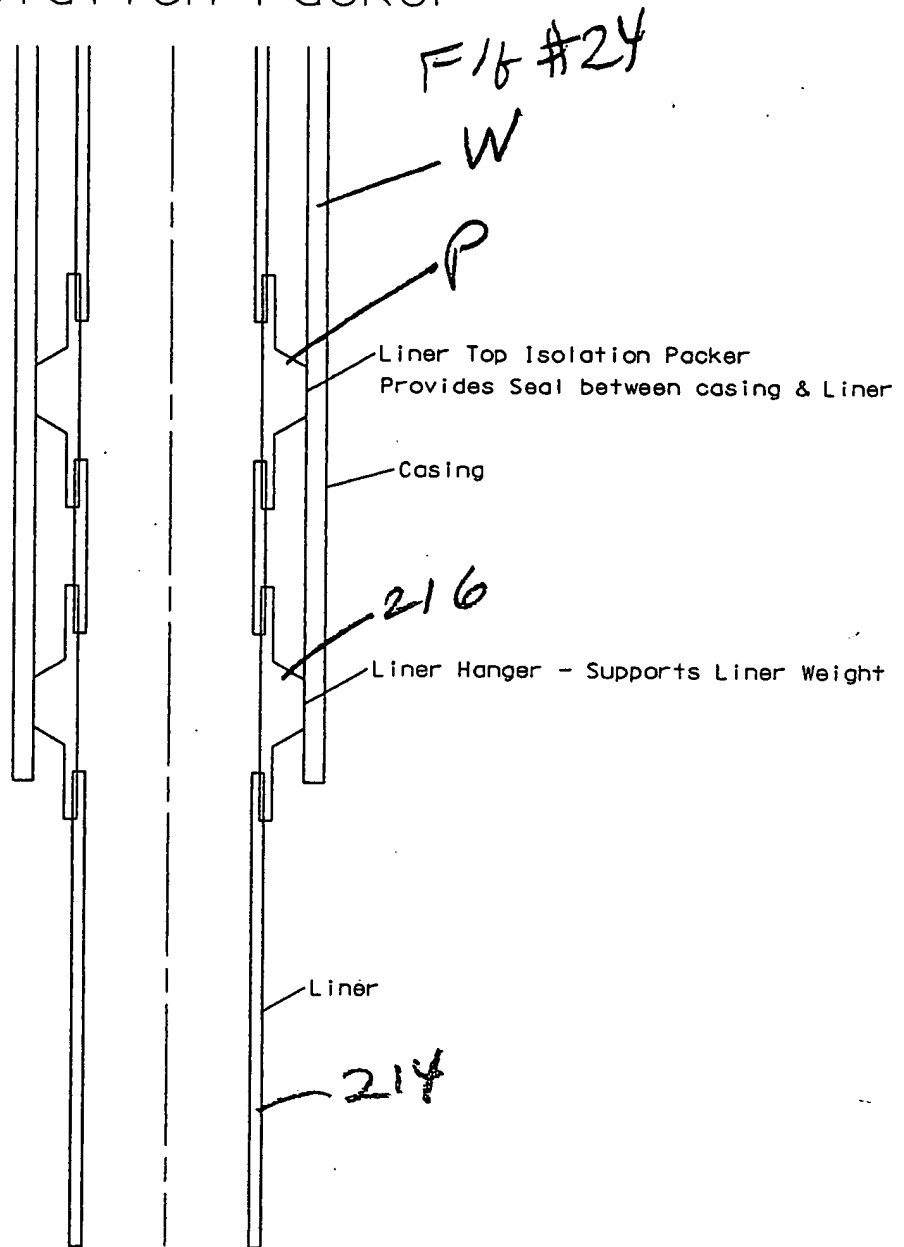


Figure 9

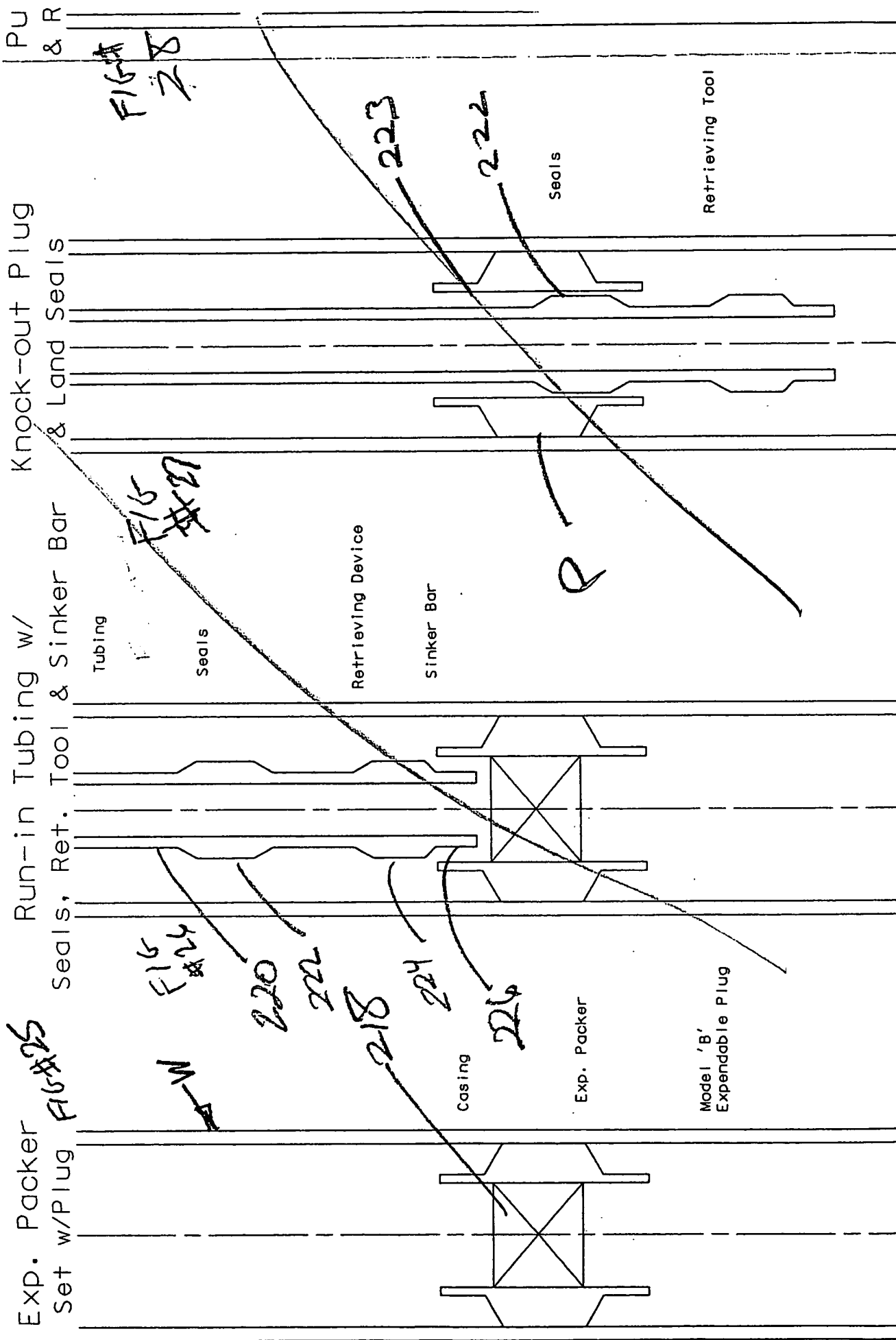


Figure 9

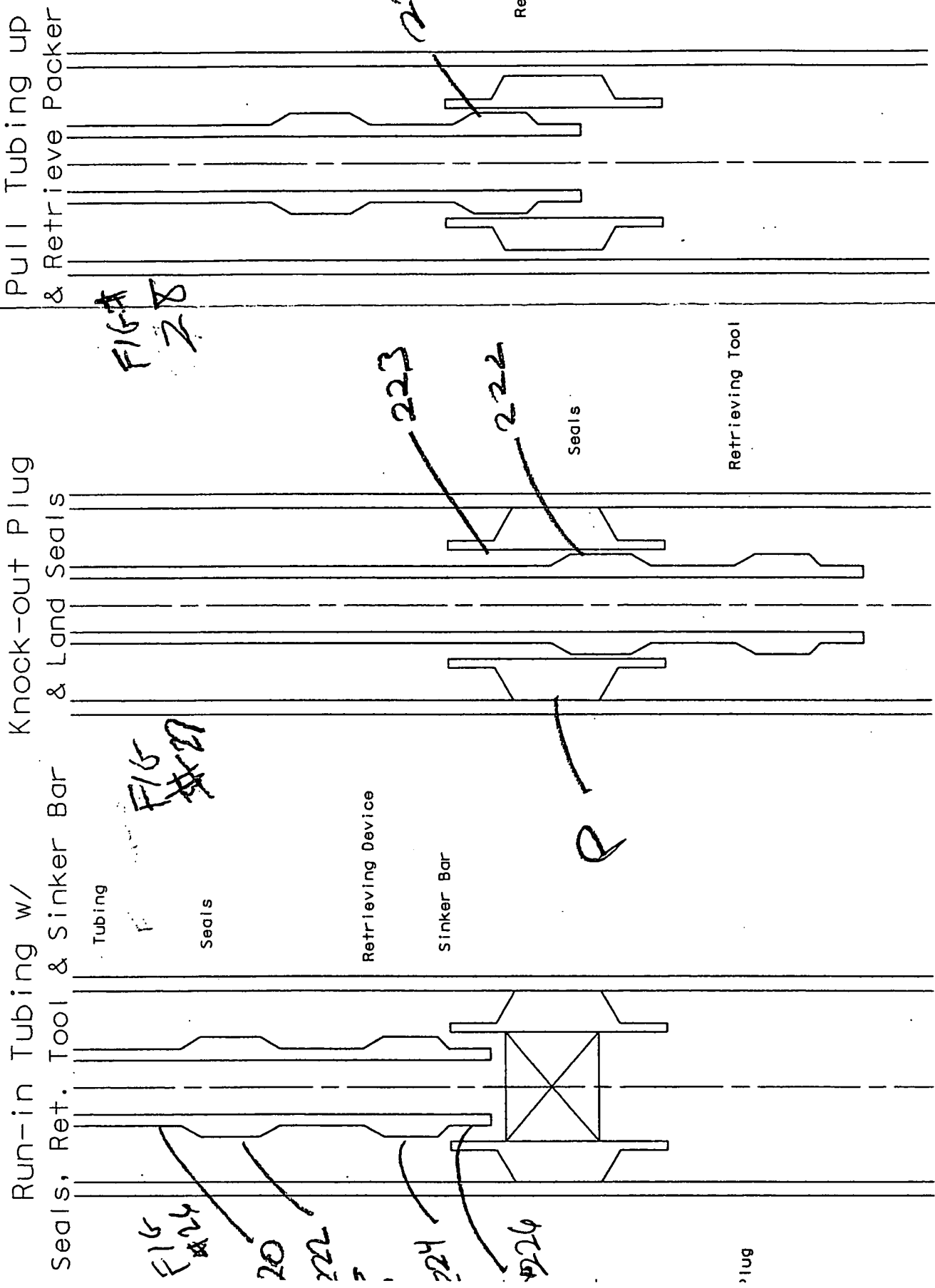
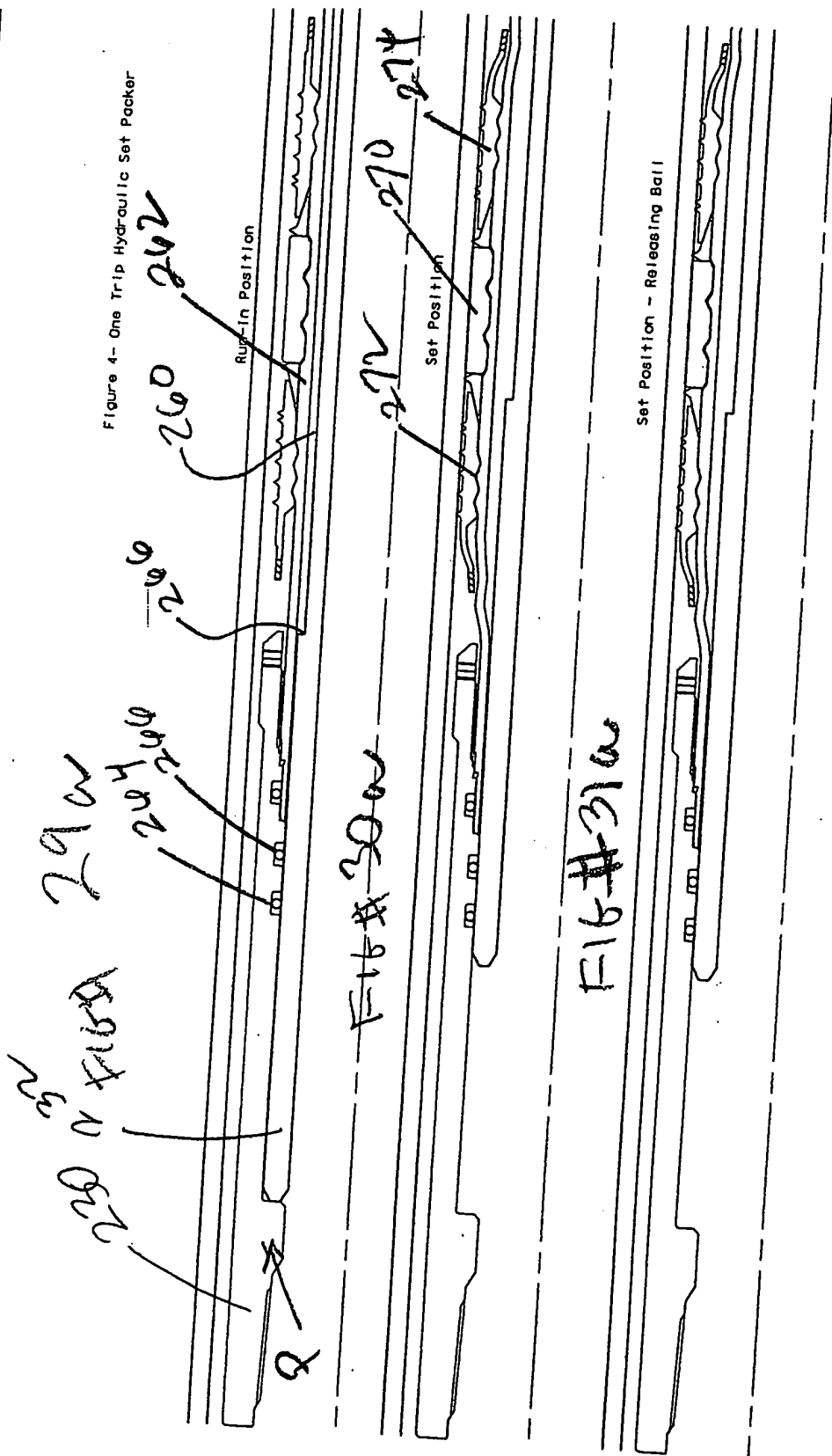


Figure 4- One Trip Hydraulic Set Packer



FISHING DOCK

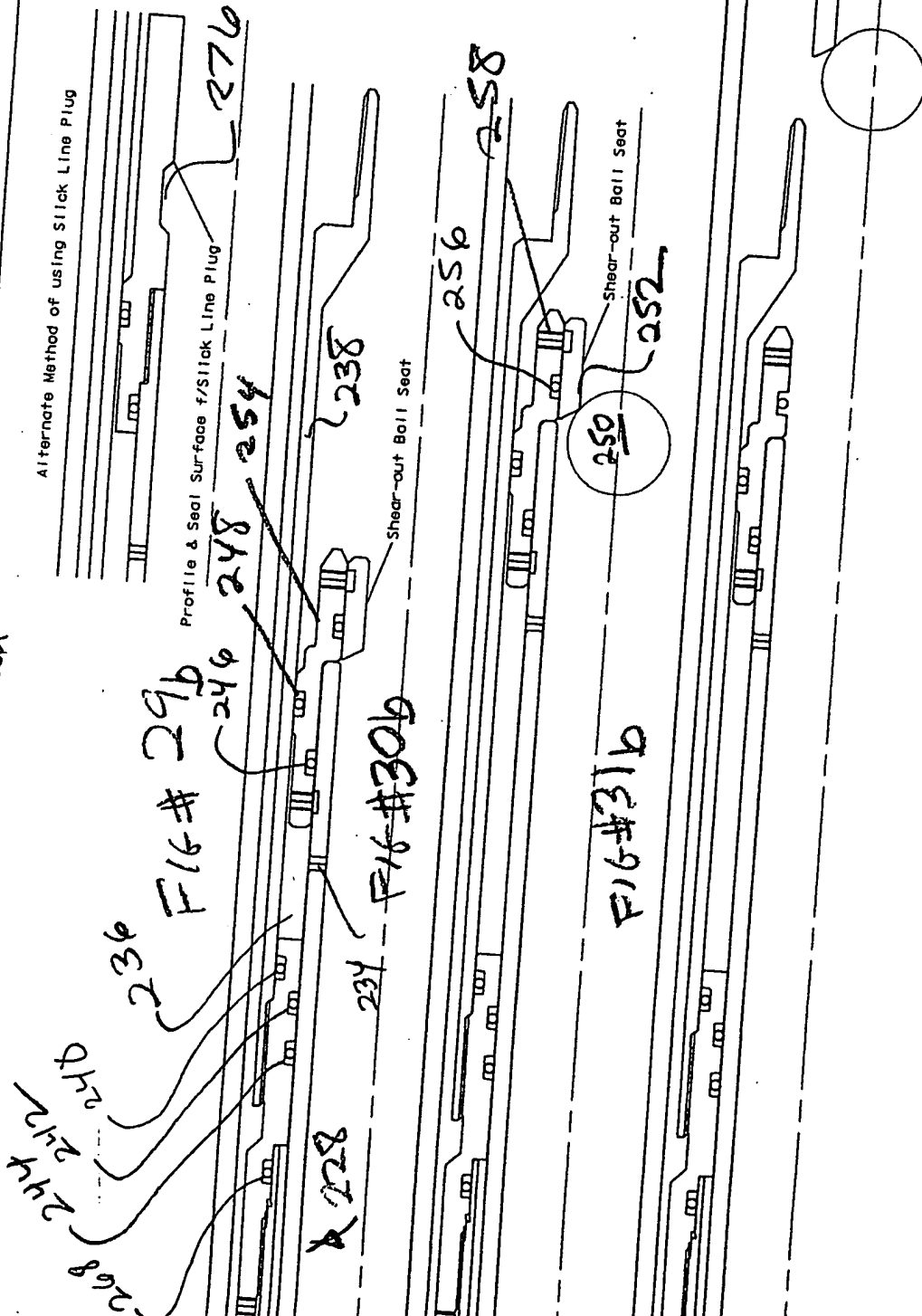
Alternate Method of using Slick Line Plug

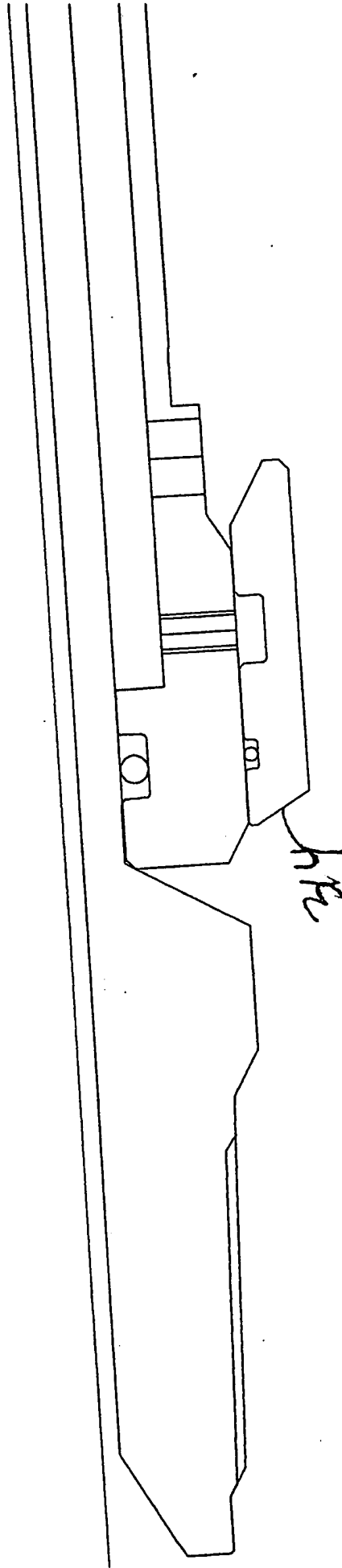
176-#32

Profile & Seal Surface f/Slick Line Plug

Shear-out Ball Seat

Shear-out Ball Seat





FILE 332

FIG. # 33b

2 318

320 322 318

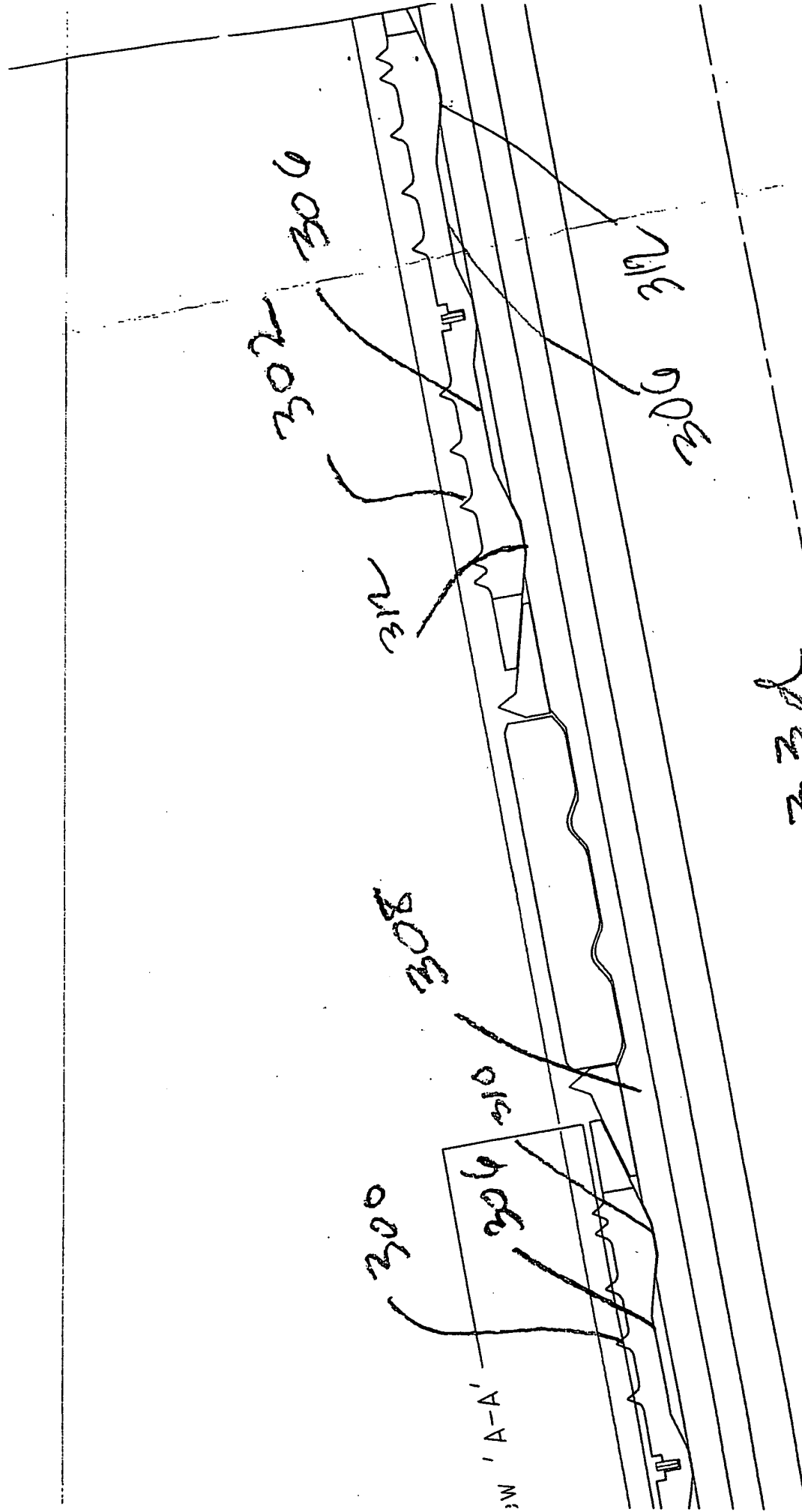
328

310

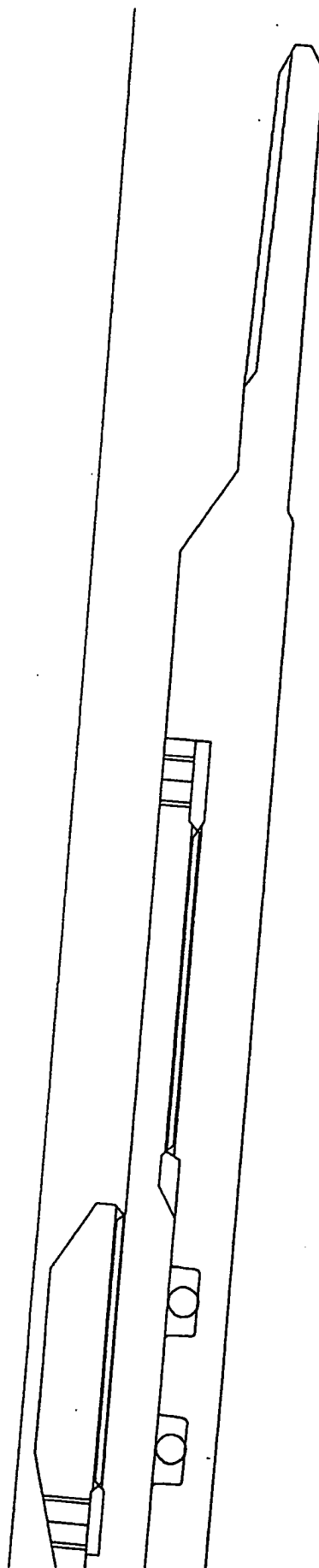
3

324 326

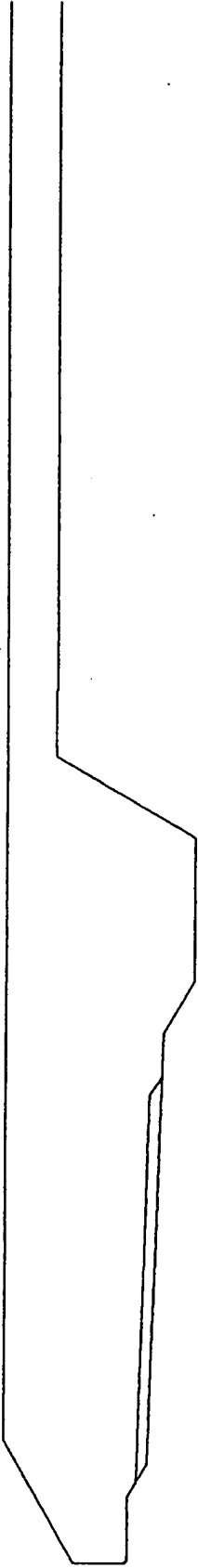
FIG #33C



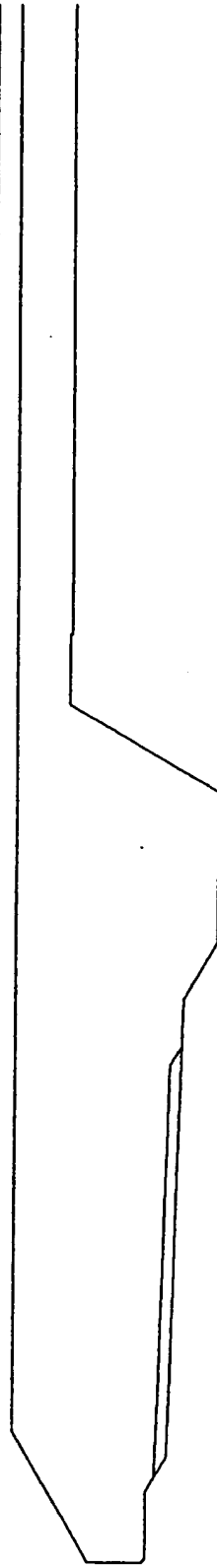
FIG# 33d



F16A33C



F16#34a



F16#35a

F16#346

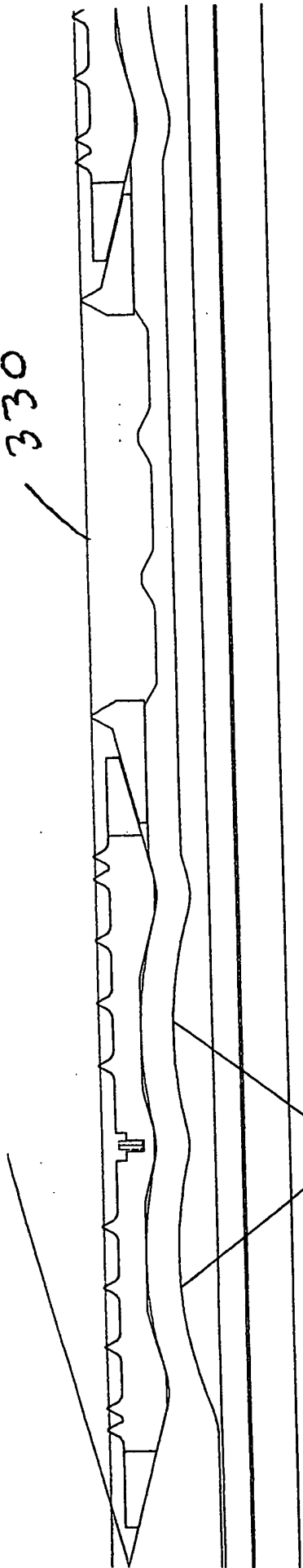
F16#356

FIG 34C

316

FIG 35C

330



Expansion Mandrel forms in void in Slip Mandrel

Fig #34d

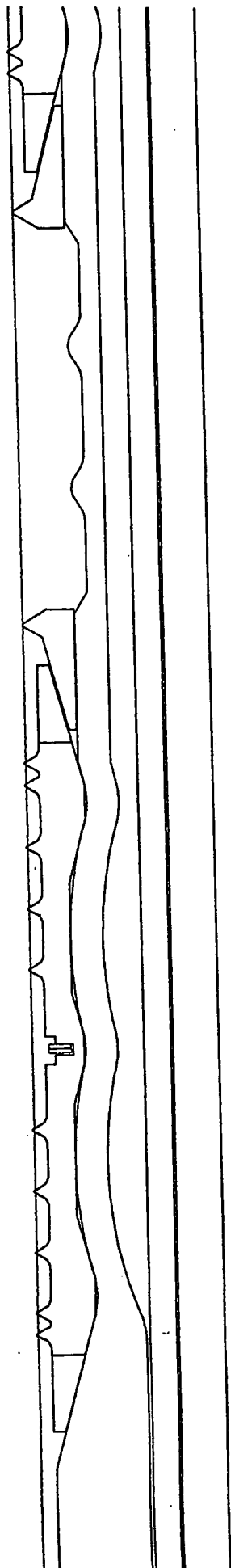


Fig #35d

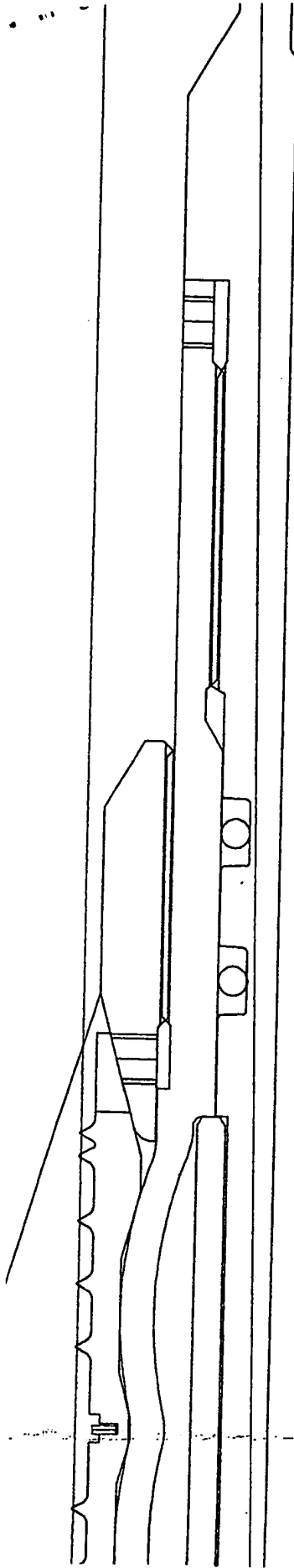


FIG 342

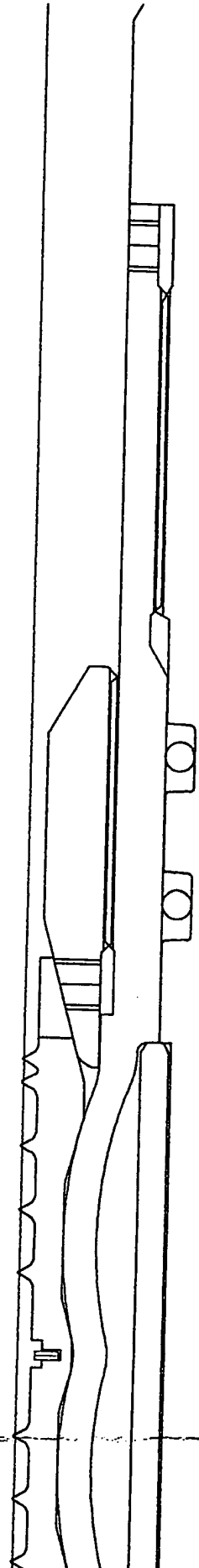


FIG 352

2 3 4

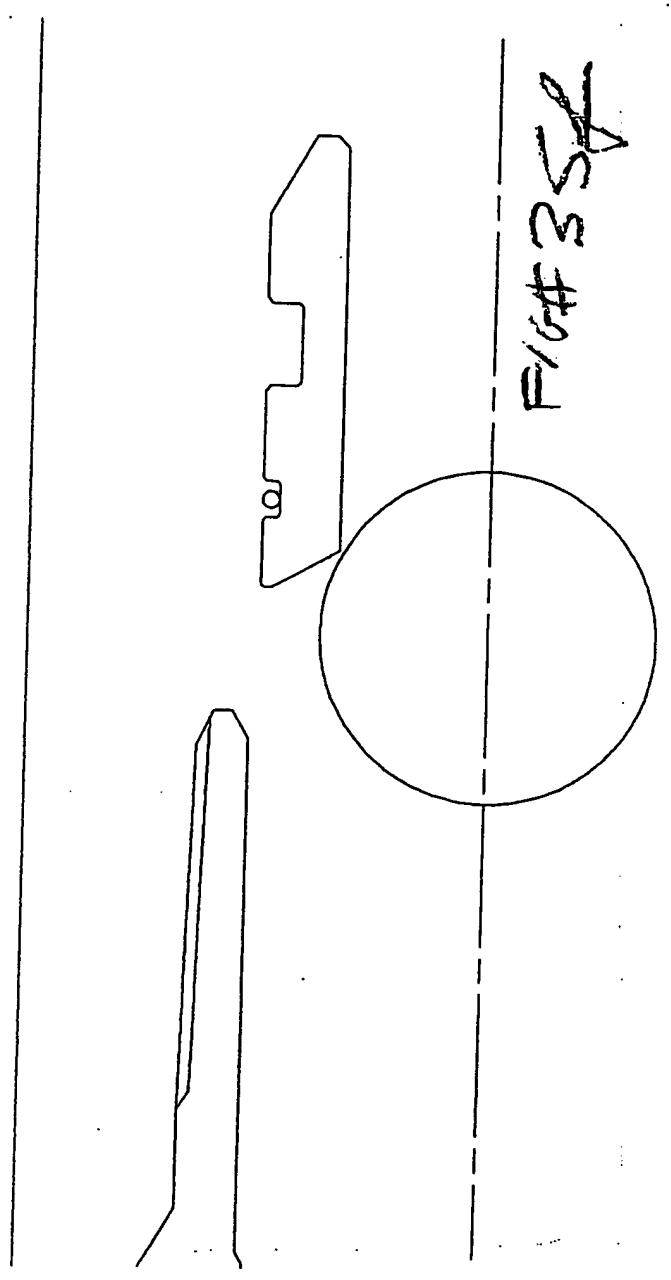
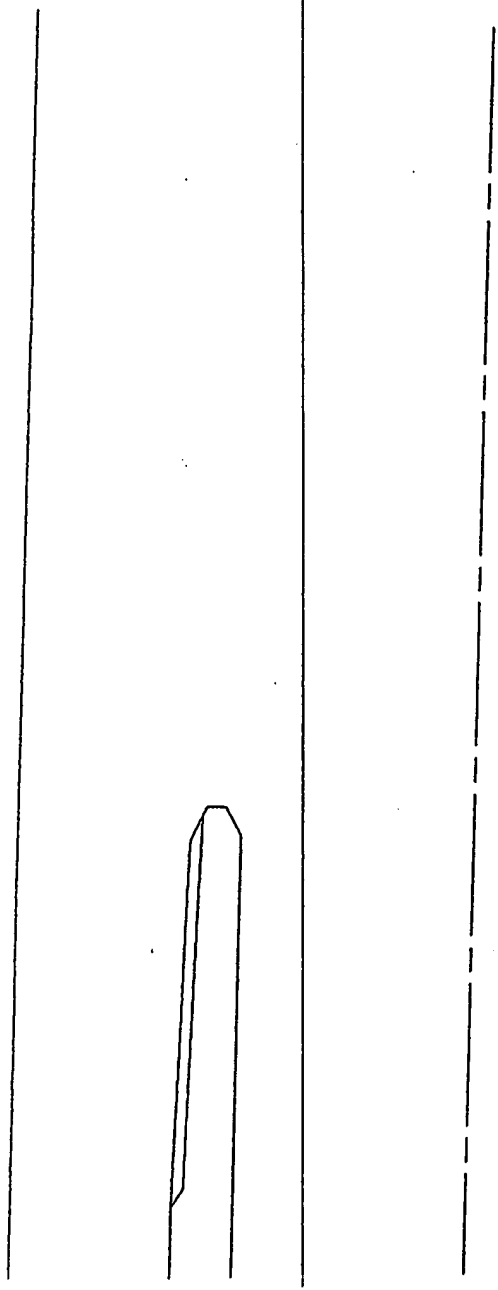


Fig # 358